APPENDIX A

- 24-Hour Segment Counts
- SANDAG Trip Generation Rates
- County of San Diego Level of Service Thresholds
- Excerpts from the *Public Facilities Element*
- County's *Guidelines for Determining Significance* (Sept. 26 2006)
- County's *Draft Guidelines for Determining Significance* (Aug. 2007)
- Caltrans *Guide for the Preparation of Traffic Impact Studies*
- *County Bicycle Master Plan –Pala-Pauma*

24-Hour Segment Counts

Volumes for: Thursday, February 24, 2005 City: pala Project #: 05-3060-001

Location: Pala Rd btwn Old Hwy 395 & I-15

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		63			12:00			164		172		
00:15			21		47			12:15			155		172		
00:30			19		36			12:30			151		151		
00:45			26	92	40	186	278	12:45			157	627	177	672	1299
01:00			20		29			13:00			168		184		
01:15			23		20			13:15			154		173		
01:30			20		27			13:30			153		180		
01:45			20	83	33	109	192	13:45			194	669	195	732	1401
02:00			18		25			14:00			167		212		
02:15			14		17			14:15			186		207		
02:30			14		28			14:30			198		212		
02:45			6	52	27	97	149	14:45			201	752	188	819	1571
03:00			14		16			15:00			214		205		
03:15			15		24			15:15			196		233		
03:30			14		24			15:30			227		232		
03:45			12	55	37	101	156	15:45			230	867	233	903	1770
04:00			11		24			16:00			206		272		
04:15			24		47			16:15			220		226		
04:30			38		62			16:30			250		242		
04:45			39	112	74	207	319	16:45			189	865	255	995	1860
05:00			49		97			17:00			214		242		
05:15			69		120			17:15			234		228		
05:30			92		146			17:30			178		240		
05:45			127	337	167	530	867	17:45			214	840	200	910	1750
06:00			114		171			18:00			183		248		
06:15			161		184			18:15			180		195		
06:30			201		188			18:30			155		189		
06:45			176	652	192	735	1387	18:45			163	681	153	785	1466
07:00			170		212			19:00			131		138		
07:15			217		210			19:15			102		112		
07:30			217		180			19:30			109		91		
07:45			198	802	200	802	1604	19:45			105	447	101	442	889
08:00			239		185			20:00			103		119		
08:15			165		190			20:15			73		103		
08:30			202		165			20:30			86		89		
08:45			165	771	194	734	1505	20:45			81	343	70	381	724
09:00			202		175			21:00			74		82		
09:15			162		165			21:15			69		74		
09:30			172		162			21:30			93		82		
09:45			190	726	179	681	1407	21:45			65	301	70	308	609
10:00			183		178			22:00			69		69		
10:15			195		156			22:15			59		56		
10:30			179		162			22:30			66		57		
10:45			162	719	149	645	1364	22:45			55	249	63	245	494
11:00			185		142			23:00			32		50		
11:15			154		184			23:15			35		51		
11:30			169		154			23:30			39		44		
11:45			179	687	141	621	1308	23:45			25	131	44	189	320
Total Vol.				5088		5448	**10536**					6772		7381	**14153**

Daily Totals

NB	SB	EB	WB	Combined
		11860	12829	**24689**

	AM			PM		
Split %	48.3%	51.7%	**42.7%**	47.8%	52.2%	**57.3%**
Peak Hour	07:15	06:30	**07:15**	15:45	16:00	**15:45**
Volume	871	802	**1646**	906	995	**1879**
P.H.F.	0.91	0.95	**0.96**	0.91	0.91	**0.95**

Volumes for: Thursday, February 24, 2005 City: pala Project #: 05-3060-002

Location: Pala Rd btwn Pankey Rd & I-15

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		67			12:00			108		77		
00:15			9		65			12:15			112		84		
00:30			15		30			12:30			100		100		
00:45			19	52	32	194	246	12:45			117	437	98	359	796
01:00			19		28			13:00			104		82		
01:15			16		22			13:15			103		77		
01:30			12		24			13:30			106		102		
01:45			13	60	20	94	154	13:45			119	432	92	353	785
02:00			14		23			14:00			129		106		
02:15			12		16			14:15			138		107		
02:30			13		28			14:30			137		124		
02:45			19	58	22	89	147	14:45			141	545	102	439	984
03:00			17		16			15:00			136		104		
03:15			15		22			15:15			135		130		
03:30			15		14			15:30			131		136		
03:45			11	58	20	72	130	15:45			140	542	134	504	1046
04:00			15		14			16:00			128		156		
04:15			1		16			16:15			108		135		
04:30			10		14			16:30			117		148		
04:45			8	34	26	70	104	16:45			121	474	126	565	1039
05:00			13		22			17:00			111		153		
05:15			19		27			17:15			117		123		
05:30			27		34			17:30			87		107		
05:45			36	95	42	125	220	17:45			93	408	100	483	891
06:00			43		44			18:00			91		95		
06:15			42		55			18:15			105		94		
06:30			51		56			18:30			100		94		
06:45			65	201	78	233	434	18:45			88	384	74	357	741
07:00			74		68			19:00			73		76		
07:15			78		72			19:15			71		72		
07:30			83		84			19:30			60		67		
07:45			83	318	66	290	608	19:45			57	261	50	265	526
08:00			91		82			20:00			53		69		
08:15			89		72			20:15			50		41		
08:30			91		71			20:30			46		58		
08:45			86	357	69	294	651	20:45			47	196	48	216	412
09:00			93		86			21:00			50		50		
09:15			99		70			21:15			53		48		
09:30			87		78			21:30			47		54		
09:45			86	365	80	314	679	21:45			45	195	56	208	403
10:00			97		86			22:00			41		48		
10:15			108		88			22:15			39		38		
10:30			104		78			22:30			40		50		
10:45			114	423	72	324	747	22:45			37	157	46	182	339
11:00			77		60			23:00			33		36		
11:15			97		72			23:15			27		41		
11:30			72		71			23:30			29		50		
11:45			97	343	68	271	614	23:45			31	120	34	161	281
Total Vol.				2364		2370	**4734**					4151		4092	**8243**

	Daily Totals			
NB	SB	EB	WB	**Combined**
		6515	6462	**12977**

	AM			**PM**		
Split %	49.9%	50.1%	**36.5%**	50.4%	49.6%	**63.5%**
Peak Hour	10:00	09:30	**10:00**	14:15	15:45	**15:15**
Volume	423	332	**747**	552	573	**1090**
P.H.F.	0.93	0.94	**0.95**	0.98	0.92	**0.96**

Volumes for: Thursday, February 24, 2005 City: pala Project #: 05-3060-007

Location: Pala Rd btwn Rice Canyon and Pankey Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			11		50			12:00			135		65		
00:15			9		67			12:15			110		76		
00:30			16		24			12:30			109		128		
00:45			20	56	59	200	256	12:45			133	487	118	387	874
01:00			18		44			13:00			123		106		
01:15			18		20			13:15			123		64		
01:30			14		36			13:30			114		112		
01:45			13	63	23	123	186	13:45			133	493	134	416	909
02:00			15		31			14:00			154		95		
02:15			15		25			14:15			128		109		
02:30			15		27			14:30			141		182		
02:45			22	67	26	109	176	14:45			154	577	122	508	1085
03:00			12		26			15:00			126		127		
03:15			12		28			15:15			138		131		
03:30			5		33			15:30			150		166		
03:45			12	41	20	107	148	15:45			167	581	142	566	1147
04:00			12		19			16:00			134		219		
04:15			15		15			16:15			106		169		
04:30			12		20			16:30			136		161		
04:45			12	51	26	80	131	16:45			139	515	125	674	1189
05:00			17		27			17:00			110		154		
05:15			23		36			17:15			130		161		
05:30			38		22			17:30			84		130		
05:45			40	118	28	113	231	17:45			97	421	112	557	978
06:00			52		40			18:00			97		98		
06:15			37		49			18:15			120		101		
06:30			73		43			18:30			100		77		
06:45			83	245	68	200	445	18:45			89	406	82	358	764
07:00			88		73			19:00			67		74		
07:15			83		54			19:15			67		74		
07:30			96		72			19:30			69		78		
07:45			95	362	39	238	600	19:45			60	263	60	286	549
08:00			108		73			20:00			54		50		
08:15			97		66			20:15			64		58		
08:30			100		57			20:30			50		59		
08:45			84	389	69	265	654	20:45			47	215	48	215	430
09:00			96		53			21:00			55		41		
09:15			121		66			21:15			47		44		
09:30			86		67			21:30			60		54		
09:45			101	404	65	251	655	21:45			55	217	54	193	410
10:00			106		74			22:00			54		68		
10:15			130		65			22:15			38		32		
10:30			144		58			22:30			46		46		
10:45			134	514	65	262	776	22:45			46	184	56	202	386
11:00			93		55			23:00			35		51		
11:15			99		83			23:15			33		47		
11:30			104		81			23:30			22		60		
11:45			119	415	68	287	702	23:45			43	133	44	202	335
Total Vol.				2725		2235	**4960**					4492		4564	**9056**

Daily Totals

NB	SB	EB	WB	Combined
		7217	6799	**14016**

	AM			PM		
Split %	54.9%	45.1%	**35.4%**	49.6%	50.4%	**64.6%**
Peak Hour	10:00	11:45	**11:45**	15:15	15:30	**15:30**
Volume	514	337	**810**	589	696	**1253**
P.H.F.	0.89	0.66	**0.85**	0.88	0.79	**0.89**

Volumes for: Thursday, March 17, 2005 City: Fallbrook Project #: 05-3107-001

Location: SR-76 (Pala Rd) btwn Jamies Way and Pala Del Norte Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			23		50			12:00			107		91		
00:15			15		53			12:15			127		95		
00:30			10		46			12:30			127		97		
00:45			11	59	46	195	254	12:45			114	475	68	351	826
01:00			9		46			13:00			94		110		
01:15			11		50			13:15			105		96		
01:30			11		52			13:30			158		100		
01:45			12	43	20	168	211	13:45			112	469	101	407	876
02:00			13		41			14:00			114		78		
02:15			19		34			14:15			123		125		
02:30			11		28			14:30			139		96		
02:45			10	53	46	149	202	14:45			106	482	117	416	898
03:00			5		38			15:00			115		138		
03:15			4		25			15:15			95		107		
03:30			7		19			15:30			135		147		
03:45			9	25	26	108	133	15:45			137	482	116	508	990
04:00			6		15			16:00			127		108		
04:15			11		21			16:15			135		111		
04:30			9		26			16:30			140		108		
04:45			23	49	30	92	141	16:45			122	524	103	430	954
05:00			27		26			17:00			124		81		
05:15			24		42			17:15			138		101		
05:30			58		43			17:30			161		97		
05:45			61	170	49	160	330	17:45			173	596	86	365	961
06:00			47		48			18:00			148		59		
06:15			43		51			18:15			146		87		
06:30			75		52			18:30			154		82		
06:45			59	224	63	214	438	18:45			129	577	86	314	891
07:00			72		63			19:00			99		66		
07:15			71		77			19:15			104		73		
07:30			95		61			19:30			67		66		
07:45			91	329	51	252	581	19:45			66	336	56	261	597
08:00			74		36			20:00			55		43		
08:15			90		79			20:15			78		88		
08:30			98		70			20:30			53		72		
08:45			76	338	75	260	598	20:45			53	239	61	264	503
09:00			104		56			21:00			40		63		
09:15			98		68			21:15			53		67		
09:30			115		71			21:30			38		45		
09:45			122	439	55	250	689	21:45			40	171	92	267	438
10:00			107		66			22:00			35		214		
10:15			111		74			22:15			37		170		
10:30			112		81			22:30			44		108		
10:45			131	461	75	296	757	22:45			35	151	103	595	746
11:00			122		89			23:00			12		107		
11:15			132		58			23:15			37		89		
11:30			131		89			23:30			26		62		
11:45			115	500	82	318	818	23:45			22	97	78	336	433
Total Vol.				2690		2462	**5152**					4599		4514	**9113**

Daily Totals

NB	SB	EB	WB	Combined
		7289	6976	**14265**

	AM			PM		
Split %	52.2%	47.8%	**36.1%**	50.5%	49.5%	**63.9%**
Peak Hour	10:45	11:45	**11:45**	17:30	22:00	**15:30**
Volume	516	365	**841**	628	595	**1016**
P.H.F.	0.98	0.94	**0.94**	0.91	0.70	**0.90**

Volumes for: Thursday, March 17, 2005 City: Fallbrook Project #: 05-3107-002

Location: SR-76 (Pala Rd) btwn Pala Del Norte Rd and Pala Temecula Rd

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			20		78			12:00			113		76		
00:15			25		44			12:15			127		69		
00:30			10		52			12:30			125		67		
00:45			14	69	48	222	291	12:45			102	467	77	289	756
01:00			15		46			13:00			111		80		
01:15			7		48			13:15			111		78		
01:30			11		42			13:30			150		73		
01:45			17	50	39	175	225	13:45			123	495	73	304	799
02:00			9		30			14:00			124		70		
02:15			13		36			14:15			123		106		
02:30			18		29			14:30			127		85		
02:45			16	56	30	125	181	14:45			130	504	113	374	878
03:00			11		41			15:00			125		88		
03:15			7		37			15:15			103		83		
03:30			4		20			15:30			154		128		
03:45			8	30	23	121	151	15:45			129	511	86	385	896
04:00			6		25			16:00			157		86		
04:15			7		17			16:15			135		76		
04:30			10		20			16:30			175		77		
04:45			10	33	27	89	122	16:45			147	614	52	291	905
05:00			21		29			17:00			152		59		
05:15			28		38			17:15			148		59		
05:30			24		27			17:30			182		70		
05:45			50	123	40	134	257	17:45			191	673	52	240	913
06:00			55		43			18:00			139		75		
06:15			54		41			18:15			139		60		
06:30			53		46			18:30			143		81		
06:45			78	240	35	165	405	18:45			141	562	66	282	844
07:00			69		41			19:00			114		69		
07:15			56		44			19:15			116		54		
07:30			82		44			19:30			78		57		
07:45			106	313	45	174	487	19:45			56	364	46	226	590
08:00			91		20			20:00			63		56		
08:15			89		48			20:15			84		60		
08:30			88		62			20:30			53		69		
08:45			91	359	51	181	540	20:45			49	249	60	245	494
09:00			76		42			21:00			43		56		
09:15			100		52			21:15			47		56		
09:30			108		46			21:30			37		55		
09:45			99	383	57	197	580	21:45			53	180	126	293	473
10:00			143		48			22:00			40		214		
10:15			135		51			22:15			38		140		
10:30			141		60			22:30			48		88		
10:45			139	558	54	213	771	22:45			37	163	92	534	697
11:00			133		48			23:00			29		96		
11:15			138		61			23:15			35		73		
11:30			122		56			23:30			29		70		
11:45			130	523	72	237	760	23:45			22	115	73	312	427
Total Vol.				2737		2033	**4770**					4897		3775	**8672**

			Daily Totals		
	NB	SB	EB	WB	**Combined**
			7634	5808	**13442**

	AM			**PM**		
Split %	57.4%	42.6%	**35.5%**	56.5%	43.5%	**64.5%**
Peak Hour	10:00	11:45	**11:45**	17:00	21:45	**15:30**
Volume	558	284	**779**	673	568	**951**
P.H.F.	0.98	0.93	**0.96**	0.88	0.66	**0.84**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-001

Location: SR-76 Btwn Pala-Temecula Rd. & Lilac Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		15			12:00			83		56		
00:15			11		19			12:15			68		43		
00:30			7		20			12:30			84		66		
00:45			13	40	18	72	112	12:45			59	294	42	207	501
01:00			12		22			13:00			51		66		
01:15			5		17			13:15			68		47		
01:30			10		11			13:30			45		49		
01:45			8	35	16	66	101	13:45			80	244	47	209	453
02:00			8		12			14:00			70		45		
02:15			5		15			14:15			67		75		
02:30			11		14			14:30			60		56		
02:45			5	29	8	49	78	14:45			70	267	77	253	520
03:00			5		12			15:00			63		46		
03:15			3		14			15:15			55		49		
03:30			3		13			15:30			56		72		
03:45			6	17	12	51	68	15:45			76	250	63	230	480
04:00			4		9			16:00			60		56		
04:15			2		12			16:15			89		57		
04:30			7		11			16:30			58		69		
04:45			10	23	16	48	71	16:45			66	273	50	232	505
05:00			19		21			17:00			48		52		
05:15			30		12			17:15			54		50		
05:30			22		29			17:30			62		62		
05:45			47	118	40	102	220	17:45			58	222	51	215	437
06:00			41		35			18:00			53		67		
06:15			26		30			18:15			45		55		
06:30			38		39			18:30			55		62		
06:45			49	154	38	142	296	18:45			47	200	44	228	428
07:00			45		26			19:00			58		47		
07:15			38		42			19:15			47		52		
07:30			43		41			19:30			28		35		
07:45			65	191	22	131	322	19:45			32	165	32	166	331
08:00			54		25			20:00			17		35		
08:15			53		43			20:15			15		37		
08:30			59		41			20:30			28		34		
08:45			47	213	39	148	361	20:45			23	83	26	132	215
09:00			57		38			21:00			24		38		
09:15			61		35			21:15			18		23		
09:30			60		38			21:30			27		18		
09:45			67	245	41	152	397	21:45			26	95	28	107	202
10:00			71		45			22:00			38		27		
10:15			73		41			22:15			26		30		
10:30			74		36			22:30			23		32		
10:45			65	283	47	169	452	22:45			16	103	27	116	219
11:00			70		35			23:00			14		23		
11:15			88		50			23:15			18		27		
11:30			59		45			23:30			21		17		
11:45			63	280	62	192	472	23:45			20	73	27	94	167
Total Vol.				1628		1322	**2950**					2269		2189	**4458**

Daily Totals

NB	SB	EB	WB	Combined
		3897	3511	**7408**

	AM			PM		
Split %	55.2%	44.8%	**39.8%**	50.9%	49.1%	**60.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	14:15	**15:30**
Volume	298	227	**525**	294	254	**529**
P.H.F.	0.89	0.86	**0.88**	0.88	0.82	**0.91**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-002

Location: SR-76 Btwn Lilac Rd. & Pauma Reservation Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			7		22			12:00			76		45		
00:15			19		29			12:15			60		42		
00:30			11		26			12:30			73		41		
00:45			13	50	29	106	156	12:45			71	280	44	172	452
01:00			12		32			13:00			71		61		
01:15			9		24			13:15			62		53		
01:30			5		25			13:30			60		39		
01:45			7	33	24	105	138	13:45			49	242	57	210	452
02:00			5		31			14:00			72		65		
02:15			7		22			14:15			62		59		
02:30			9		15			14:30			65		60		
02:45			13	34	12	80	114	14:45			63	262	74	258	520
03:00			6		18			15:00			64		52		
03:15			4		14			15:15			70		75		
03:30			3		14			15:30			72		70		
03:45			4	17	9	55	72	15:45			74	280	73	270	550
04:00			2		13			16:00			65		92		
04:15			7		17			16:15			53		83		
04:30			12		12			16:30			71		65		
04:45			9	30	9	51	81	16:45			61	250	74	314	564
05:00			9		19			17:00			53		71		
05:15			20		25			17:15			74		57		
05:30			25		20			17:30			75		70		
05:45			29	83	23	87	170	17:45			67	269	53	251	520
06:00			44		26			18:00			51		60		
06:15			43		37			18:15			57		50		
06:30			61		29			18:30			35		45		
06:45			41	189	52	144	333	18:45			46	189	48	203	392
07:00			41		31			19:00			44		42		
07:15			53		41			19:15			38		29		
07:30			83		47			19:30			30		31		
07:45			60	237	39	158	395	19:45			35	147	38	140	287
08:00			61		45			20:00			45		43		
08:15			59		52			20:15			26		41		
08:30			47		37			20:30			39		36		
08:45			70	237	25	159	396	20:45			31	141	33	153	294
09:00			76		43			21:00			22		28		
09:15			73		37			21:15			32		38		
09:30			77		40			21:30			18		30		
09:45			67	293	40	160	453	21:45			26	98	27	123	221
10:00			70		38			22:00			29		27		
10:15			71		36			22:15			27		40		
10:30			65		40			22:30			30		27		
10:45			51	257	42	156	413	22:45			32	118	24	118	236
11:00			53		41			23:00			24		33		
11:15			48		48			23:15			22		19		
11:30			49		38			23:30			24		30		
11:45			59	209	56	183	392	23:45			17	87	28	110	197
Total Vol.			1669		1444	**3113**					2363		2322		**4685**

Daily Totals

NB	SB	EB	WB	Combined
		4032	3766	**7798**

	AM			PM		
Split %	53.6%	46.4%	**39.9%**	50.4%	49.6%	**60.1%**
Peak Hour	08:45	11:15	**09:00**	15:15	15:30	**15:15**
Volume	296	187	**453**	281	318	**591**
P.H.F.	0.96	0.83	**0.95**	0.95	0.86	**0.94**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-003

Location: SR-76 Btwn Pauma Reservation Rd. & Cole Grade Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			14		19			12:00			64		55		
00:15			10		24			12:15			61		77		
00:30			10		16			12:30			82		54		
00:45			11	45	13	72	117	12:45			66	273	55	241	514
01:00			10		26			13:00			48		66		
01:15			5		11			13:15			69		62		
01:30			12		16			13:30			57		76		
01:45			5	32	12	65	97	13:45			56	230	61	265	495
02:00			12		19			14:00			77		63		
02:15			7		18			14:15			67		84		
02:30			5		17			14:30			83		85		
02:45			6	30	9	63	93	14:45			82	309	92	324	633
03:00			5		6			15:00			78		64		
03:15			6		12			15:15			66		85		
03:30			1		9			15:30			67		90		
03:45			6	18	9	36	54	15:45			72	283	80	319	602
04:00			4		12			16:00			89		86		
04:15			4		10			16:15			102		88		
04:30			6		12			16:30			82		104		
04:45			5	19	11	45	64	16:45			79	352	92	370	722
05:00			12		17			17:00			100		94		
05:15			18		18			17:15			71		84		
05:30			18		30			17:30			80		89		
05:45			34	82	32	97	179	17:45			65	316	69	336	652
06:00			32		24			18:00			68		99		
06:15			56		46			18:15			54		75		
06:30			50		75			18:30			47		63		
06:45			47	185	59	204	389	18:45			51	220	62	299	519
07:00			51		37			19:00			50		59		
07:15			56		49			19:15			45		63		
07:30			61		54			19:30			37		44		
07:45			64	232	58	198	430	19:45			31	163	38	204	367
08:00			55		48			20:00			29		48		
08:15			60		56			20:15			20		51		
08:30			43		53			20:30			34		28		
08:45			51	209	40	197	406	20:45			19	102	44	171	273
09:00			54		45			21:00			31		36		
09:15			54		67			21:15			22		30		
09:30			56		60			21:30			27		28		
09:45			57	221	68	240	461	21:45			18	98	34	128	226
10:00			45		59			22:00			40		33		
10:15			73		61			22:15			29		26		
10:30			66		49			22:30			16		28		
10:45			64	248	47	216	464	22:45			16	101	28	115	216
11:00			70		63			23:00			17		26		
11:15			54		66			23:15			18		24		
11:30			49		68			23:30			13		31		
11:45			61	234	69	266	500	23:45			15	63	27	108	171
Total Vol.			1555		1699		**3254**				2510		2880		**5390**

Daily Totals

NB	SB	EB	WB	Combined
		4065	4579	**8644**

	AM			PM		
Split %	47.8%	52.2%	**37.6%**	46.6%	53.4%	**62.4%**
Peak Hour	10:15	11:30	**11:45**	16:15	16:15	**16:15**
Volume	273	269	**523**	363	378	**741**
P.H.F.	0.93	0.87	**0.95**	0.89	0.91	**0.95**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-004

Location: SR-76 Btwn Cole Grade Rd. & Pauma Valley Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		24			12:00			72		56		
00:15			8		19			12:15			79		56		
00:30			6		16			12:30			84		48		
00:45			10	32	21	80	112	12:45			73	308	58	218	526
01:00			7		23			13:00			57		64		
01:15			2		14			13:15			78		56		
01:30			11		18			13:30			69		85		
01:45			2	22	19	74	96	13:45			60	264	74	279	543
02:00			10		20			14:00			66		93		
02:15			4		20			14:15			75		91		
02:30			4		19			14:30			73		84		
02:45			6	24	8	67	91	14:45			89	303	80	348	651
03:00			3		10			15:00			92		59		
03:15			3		9			15:15			77		59		
03:30			0		10			15:30			73		85		
03:45			5	11	10	39	50	15:45			76	318	69	272	590
04:00			4		11			16:00			86		80		
04:15			2		11			16:15			113		83		
04:30			6		11			16:30			89		101		
04:45			1	13	13	46	59	16:45			76	364	84	348	712
05:00			8		13			17:00			92		76		
05:15			10		18			17:15			72		74		
05:30			13		33			17:30			86		70		
05:45			25	56	33	97	153	17:45			69	319	59	279	598
06:00			22		30			18:00			67		70		
06:15			37		47			18:15			55		75		
06:30			34		52			18:30			49		52		
06:45			30	123	43	172	295	18:45			44	215	62	259	474
07:00			41		49			19:00			51		44		
07:15			32		57			19:15			49		50		
07:30			50		59			19:30			27		41		
07:45			42	165	64	229	394	19:45			33	160	30	165	325
08:00			45		47			20:00			23		38		
08:15			46		50			20:15			18		48		
08:30			39		49			20:30			33		30		
08:45			36	166	40	186	352	20:45			29	103	30	146	249
09:00			42		59			21:00			36		23		
09:15			21		62			21:15			17		23		
09:30			52		59			21:30			31		29		
09:45			40	155	57	237	392	21:45			18	102	31	106	208
10:00			40		69			22:00			37		24		
10:15			52		69			22:15			24		26		
10:30			48		53			22:30			10		23		
10:45			47	187	69	260	447	22:45			16	87	29	102	189
11:00			55		57			23:00			16		23		
11:15			43		77			23:15			18		14		
11:30			40		84			23:30			13		30		
11:45			52	190	66	284	474	23:45			13	60	25	92	152
Total Vol.				1144		1771	**2915**					2603		2614	**5217**

Daily Totals

NB	SB	EB	WB	Combined
		3747	4385	**8132**

	AM			PM		
Split %	39.2%	60.8%	**35.8%**	49.9%	50.1%	**64.2%**
Peak Hour	11:45	10:45	**11:45**	16:15	14:00	**16:15**
Volume	287	287	**513**	370	348	**714**
P.H.F.	0.85	0.85	**0.95**	0.82	0.94	**0.91**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-005

Location: SR-76 Btwn Pauma Valley DR. & Valley Center Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		18			12:00			89		51		
00:15			12		14			12:15			71		45		
00:30			4		13			12:30			74		50		
00:45			9	34	9	54	88	12:45			67	301	46	192	493
01:00			10		9			13:00			74		58		
01:15			7		9			13:15			82		42		
01:30			7		10			13:30			81		48		
01:45			3	27	10	38	65	13:45			73	310	58	206	516
02:00			6		14			14:00			84		75		
02:15			3		7			14:15			88		68		
02:30			10		12			14:30			79		69		
02:45			6	25	8	41	66	14:45			81	332	66	278	610
03:00			7		4			15:00			64		65		
03:15			3		6			15:15			97		67		
03:30			3		3			15:30			102		52		
03:45			13	26	6	19	45	15:45			77	340	75	259	599
04:00			7		10			16:00			93		92		
04:15			3		6			16:15			72		85		
04:30			10		8			16:30			93		85		
04:45			7	27	11	35	62	16:45			74	332	86	348	680
05:00			4		7			17:00			93		82		
05:15			9		14			17:15			64		68		
05:30			24		23			17:30			79		47		
05:45			27	64	31	75	139	17:45			52	288	59	256	544
06:00			38		22			18:00			69		62		
06:15			29		35			18:15			57		54		
06:30			47		55			18:30			58		43		
06:45			50	164	40	152	316	18:45			59	243	43	202	445
07:00			33		32			19:00			54		37		
07:15			41		47			19:15			37		40		
07:30			60		41			19:30			37		27		
07:45			64	198	50	170	368	19:45			34	162	31	135	297
08:00			50		32			20:00			29		28		
08:15			47		34			20:15			35		20		
08:30			67		42			20:30			28		14		
08:45			59	223	32	140	363	20:45			20	112	19	81	193
09:00			49		38			21:00			28		30		
09:15			65		51			21:15			32		17		
09:30			62		50			21:30			21		18		
09:45			54	230	47	186	416	21:45			30	111	22	87	198
10:00			47		44			22:00			37		15		
10:15			49		72			22:15			24		17		
10:30			60		54			22:30			16		22		
10:45			81	237	44	214	451	22:45			20	97	14	68	165
11:00			70		52			23:00			11		11		
11:15			64		72			23:15			16		17		
11:30			70		44			23:30			19		14		
11:45			80	284	69	237	521	23:45			11	57	18	60	117
Total Vol.				1539		1361	**2900**					2685		2172	**4857**

Daily Totals

NB	SB	EB	WB	Combined
		4224	3533	**7757**

	AM			PM		
Split %	53.1%	46.9%	**37.4%**	55.3%	44.7%	**62.6%**
Peak Hour	11:45	11:00	**11:15**	15:15	16:00	**16:00**
Volume	314	237	**539**	369	348	**680**
P.H.F.	0.88	0.82	**0.90**	0.90	0.95	**0.92**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-006

Location: SR-76 Btwn Valley Center Rd. & Rincon Rancho Rd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			4		2			12:00			31		41		
00:15			4		3			12:15			32		32		
00:30			6		0			12:30			28		25		
00:45			4	18	2	7	25	12:45			27	118	32	130	248
01:00			7		0			13:00			37		32		
01:15			2		2			13:15			31		23		
01:30			4		1			13:30			30		35		
01:45			0	13	1	4	17	13:45			39	137	28	118	255
02:00			0		2			14:00			32		26		
02:15			5		0			14:15			43		25		
02:30			5		1			14:30			33		44		
02:45			3	13	2	5	18	14:45			39	147	32	127	274
03:00			4		0			15:00			35		28		
03:15			0		3			15:15			48		30		
03:30			0		2			15:30			43		27		
03:45			3	7	2	7	14	15:45			34	160	32	117	277
04:00			3		4			16:00			34		51		
04:15			3		3			16:15			35		43		
04:30			3		0			16:30			38		49		
04:45			7	16	6	13	29	16:45			50	157	34	177	334
05:00			3		4			17:00			48		32		
05:15			7		7			17:15			33		24		
05:30			13		7			17:30			29		22		
05:45			26	49	20	38	87	17:45			25	135	14	92	227
06:00			30		14			18:00			27		22		
06:15			40		14			18:15			30		9		
06:30			44		16			18:30			32		16		
06:45			46	160	28	72	232	18:45			23	112	13	60	172
07:00			32		17			19:00			20		16		
07:15			29		20			19:15			32		8		
07:30			24		23			19:30			14		6		
07:45			21	106	26	86	192	19:45			14	80	10	40	120
08:00			37		25			20:00			18		3		
08:15			37		18			20:15			15		4		
08:30			35		29			20:30			25		7		
08:45			44	153	20	92	245	20:45			21	79	4	18	97
09:00			45		31			21:00			22		2		
09:15			54		24			21:15			13		6		
09:30			45		21			21:30			19		5		
09:45			69	213	22	98	311	21:45			17	71	3	16	87
10:00			43		18			22:00			20		4		
10:15			60		18			22:15			5		10		
10:30			67		29			22:30			8		5		
10:45			70	240	16	81	321	22:45			4	37	4	23	60
11:00			71		17			23:00			11		3		
11:15			60		14			23:15			14		5		
11:30			42		21			23:30			7		4		
11:45			34	207	24	76	283	23:45			9	41	2	14	55
Total Vol.				1195		579	**1774**					1274		932	**2206**

Daily Totals

NB	SB	EB	WB	Combined
		2469	1511	**3980**

	AM			PM		
Split %	67.4%	32.6%	**44.6%**	57.8%	42.2%	**55.4%**
Peak Hour	10:15	11:45	**10:15**	16:15	16:00	**16:00**
Volume	268	122	**348**	171	177	**334**
P.H.F.	0.94	0.74	**0.91**	0.86	0.87	**0.96**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-008

Location: Valley Center S/o SR-76

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		13					12:00	46		73				
00:15	15		4					12:15	64		64				
00:30	9		2					12:30	52		57				
00:45	14	55	3	22			77	12:45	63	225	46	240			465
01:00	12		8					13:00	51		58				
01:15	15		9					13:15	58		72				
01:30	11		5					13:30	53		55				
01:45	12	50	7	29			79	13:45	50	212	61	246			458
02:00	10		3					14:00	62		47				
02:15	17		5					14:15	92		51				
02:30	12		5					14:30	60		59				
02:45	11	50	1	14			64	14:45	51	265	62	219			484
03:00	4		5					15:00	76		60				
03:15	8		4					15:15	89		53				
03:30	5		6					15:30	88		88				
03:45	5	22	3	18			40	15:45	61	314	73	274			588
04:00	8		10					16:00	79		92				
04:15	10		11					16:15	66		76				
04:30	14		6					16:30	103		89				
04:45	7	39	6	33			72	16:45	63	311	74	331			642
05:00	15		6					17:00	72		94				
05:15	9		18					17:15	65		64				
05:30	23		23					17:30	59		63				
05:45	44	91	34	81			172	17:45	83	279	53	274			553
06:00	31		28					18:00	57		46				
06:15	44		38					18:15	59		46				
06:30	67		34					18:30	39		25				
06:45	46	188	64	164			352	18:45	62	217	28	145			362
07:00	45		43					19:00	37		38				
07:15	45		64					19:15	34		16				
07:30	42		59					19:30	32		18				
07:45	39	171	59	225			396	19:45	27	130	24	96			226
08:00	49		88					20:00	36		25				
08:15	45		59					20:15	25		15				
08:30	54		53					20:30	26		24				
08:45	61	209	48	248			457	20:45	26	113	19	83			196
09:00	43		48					21:00	29		17				
09:15	44		58					21:15	38		14				
09:30	44		50					21:30	25		16				
09:45	50	181	69	225			406	21:45	22	114	22	69			183
10:00	47		56					22:00	34		16				
10:15	61		52					22:15	20		20				
10:30	60		52					22:30	17		12				
10:45	48	216	56	216			432	22:45	11	82	14	62			144
11:00	55		67					23:00	17		9				
11:15	55		55					23:15	16		11				
11:30	54		58					23:30	18		12				
11:45	60	224	52	232			456	23:45	12	63	12	44			107
Total Vol.		1496		1507			**3003**			2325		2083			**4408**

Daily Totals

NB	SB	EB	WB	Combined
3821	3590			**7411**

	AM			PM		
Split %	49.8%	50.2%	**40.5%**	52.7%	47.3%	**59.5%**
Peak Hour	10:15	07:15	**11:30**	15:15	16:15	**16:00**
Volume	224	270	**471**	317	333	**642**
P.H.F.	0.92	0.77	**0.92**	0.84	0.89	**0.84**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Wednesday, January 18, 2006 City: Valley Center Project #: 05-4335-001

Location: Valley Center btwn Miller Rd and Lilac Rd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	22		25					12:00	151		185				
00:15	23		29					12:15	180		211				
00:30	21		24					12:30	210		239				
00:45	19	85	27	105			190	12:45	196	737	240	875			1612
01:00	17		34					13:00	195		203				
01:15	22		20					13:15	191		150				
01:30	10		20					13:30	172		170				
01:45	11	60	22	96			156	13:45	215	773	190	713			1486
02:00	6		12					14:00	210		171				
02:15	12		26					14:15	200		216				
02:30	14		21					14:30	241		205				
02:45	12	44	12	71			115	14:45	235	886	165	757			1643
03:00	15		16					15:00	247		173				
03:15	11		16					15:15	270		190				
03:30	5		17					15:30	264		185				
03:45	7	38	22	71			109	15:45	285	1066	200	748			1814
04:00	9		11					16:00	260		203				
04:15	8		29					16:15	277		216				
04:30	19		40					16:30	267		207				
04:45	10	46	42	122			168	16:45	272	1076	211	837			1913
05:00	20		63					17:00	277		215				
05:15	28		97					17:15	286		223				
05:30	59		136					17:30	264		206				
05:45	47	154	155	451			605	17:45	247	1074	191	835			1909
06:00	72		139					18:00	219		154				
06:15	92		186					18:15	224		157				
06:30	112		200					18:30	217		153				
06:45	148	424	186	711			1135	18:45	189	849	132	596			1445
07:00	227		186					19:00	180		126				
07:15	250		262					19:15	182		128				
07:30	216		259					19:30	150		103				
07:45	227	920	218	925			1845	19:45	120	632	84	441			1073
08:00	190		228					20:00	110		77				
08:15	227		230					20:15	103		72				
08:30	184		232					20:30	93		65				
08:45	163	764	172	862			1626	20:45	146	452	103	317			769
09:00	114		194					21:00	94		66				
09:15	109		211					21:15	115		81				
09:30	110		222					21:30	97		69				
09:45	111	444	190	817			1261	21:45	82	388	58	274			662
10:00	111		197					22:00	68		47				
10:15	140		185					22:15	82		58				
10:30	135		194					22:30	77		54				
10:45	127	513	182	758			1271	22:45	56	283	40	199			482
11:00	152		171					23:00	45		32				
11:15	150		176					23:15	56		39				
11:30	139		193					23:30	46		33				
11:45	172	613	166	706			1319	23:45	28	175	20	124			299
Total Vol.		4105		5695			**9800**			8391		6716			**15107**

Daily Totals

NB	SB	EB	WB	Combined
12496	12411			24907

	AM			PM		
Split %	41.8%	58.1%	39.3%	55.5%	44.5%	60.7%
Peak Hour	07:00	07:15	07:15	16:30	12:15	16:30
Volume	920	967	1850	1102	893	1958
P.H.F.	0.92	0.92	0.90	0.99	0.93	0.96

A21

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-010

Location: Pauma Valley Dr. Btwn SR-76 & Whisky Way

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		1					12:00	12		10				
00:15	1		0					12:15	10		5				
00:30	0		0					12:30	13		21				
00:45	0	1	1	2			3	12:45	20	55	12	48			103
01:00	0		1					13:00	6		19				
01:15	0		0					13:15	12		7				
01:30	1		0					13:30	11		16				
01:45	0	1	0	1			2	13:45	5	34	8	50			84
02:00	0		0					14:00	9		13				
02:15	0		0					14:15	20		6				
02:30	1		0					14:30	18		13				
02:45	0	1	1	1			2	14:45	20	67	12	44			111
03:00	0		0					15:00	16		17				
03:15	0		0					15:15	13		12				
03:30	0		1					15:30	18		17				
03:45	0	0	0	1			1	15:45	20	67	15	61			128
04:00	0		0					16:00	13		16				
04:15	0		0					16:15	10		12				
04:30	1		1					16:30	6		8				
04:45	0	1	2	3			4	16:45	12	41	10	46			87
05:00	2		0					17:00	11		7				
05:15	0		0					17:15	5		10				
05:30	3		10					17:30	11		6				
05:45	2	7	10	20			27	17:45	14	41	7	30			71
06:00	4		6					18:00	5		6				
06:15	2		3					18:15	7		5				
06:30	0		7					18:30	6		8				
06:45	4	10	8	24			34	18:45	4	22	8	27			49
07:00	3		13					19:00	3		4				
07:15	3		9					19:15	2		6				
07:30	3		9					19:30	5		2				
07:45	4	13	10	41			54	19:45	2	12	7	19			31
08:00	11		8					20:00	0		5				
08:15	6		14					20:15	0		4				
08:30	9		10					20:30	0		4				
08:45	19	45	6	38			83	20:45	0	0	4	17			17
09:00	12		11					21:00	0		1				
09:15	5		11					21:15	6		3				
09:30	8		14					21:30	1		2				
09:45	8	33	10	46			79	21:45	0	7	3	9			16
10:00	12		8					22:00	3		5				
10:15	9		7					22:15	3		0				
10:30	8		6					22:30	0		1				
10:45	9	38	14	35			73	22:45	0	6	1	7			13
11:00	17		15					23:00	0		1				
11:15	18		12					23:15	0		0				
11:30	12		10					23:30	1		0				
11:45	14	61	11	48			109	23:45	0	1	0	1			2
Total Vol.		211		260			**471**			353		359			**712**

Daily Totals				
NB	SB	EB	WB	**Combined**
564	619			**1183**

	AM			PM		
Split %	44.8%	55.2%	**39.8%**	49.6%	50.4%	**60.2%**
Peak Hour	11:00	10:45	**11:00**	14:15	15:00	**15:00**
Volume	61	51	**109**	74	61	**128**
P.H.F.	0.85	0.85	**0.85**	0.98	0.90	**0.91**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-011

Location: Pauma Valley Dr. Btwn Cole Grade Rd & Indian Springs

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			4		11		
00:15			0		1			12:15			4		7		
00:30			0		1			12:30			7		6		
00:45			0	0	0	3	3	12:45			9	24	7	31	55
01:00			0		0			13:00			2		6		
01:15			0		0			13:15			5		8		
01:30			0		0			13:30			6		7		
01:45			0	0	0	0		13:45			9	22	8	29	51
02:00			0		0			14:00			6		14		
02:15			0		0			14:15			7		7		
02:30			0		0			14:30			1		4		
02:45			0	0	0	0		14:45			4	18	6	31	49
03:00			0		0			15:00			8		9		
03:15			0		0			15:15			3		3		
03:30			0		0			15:30			1		5		
03:45			0	0	0	0		15:45			10	22	2	19	41
04:00			0		0			16:00			5		14		
04:15			1		0			16:15			3		2		
04:30			1		0			16:30			6		10		
04:45			1	3	0	0	3	16:45			5	19	2	28	47
05:00			0		0			17:00			4		4		
05:15			0		0			17:15			10		4		
05:30			0		0			17:30			2		4		
05:45			3	3	2	2	5	17:45			2	18	6	18	36
06:00			0		2			18:00			5		2		
06:15			2		2			18:15			3		0		
06:30			2		2			18:30			2		1		
06:45			4	8	1	7	15	18:45			2	12	4	7	19
07:00			9		4			19:00			5		6		
07:15			4		5			19:15			4		0		
07:30			1		2			19:30			2		1		
07:45			3	17	5	16	33	19:45			2	13	0	7	20
08:00			9		9			20:00			1		1		
08:15			4		8			20:15			1		2		
08:30			3		9			20:30			1		1		
08:45			4	20	7	33	53	20:45			0	3	1	5	8
09:00			4		7			21:00			2		2		
09:15			4		7			21:15			0		1		
09:30			2		6			21:30			2		1		
09:45			10	20	7	27	47	21:45			3	7	1	5	12
10:00			3		14			22:00			1		0		
10:15			8		10			22:15			4		0		
10:30			7		11			22:30			2		0		
10:45			8	26	12	47	73	22:45			0	7	0	0	7
11:00			6		8			23:00			1		0		
11:15			6		10			23:15			0		2		
11:30			3		2			23:30			2		0		
11:45			3	18	4	24	42	23:45			1	4	0	2	6
Total Vol.				115		159	**274**					169		182	**351**

Daily Totals

NB	SB	EB	WB	Combined
		284	341	**625**

	AM			PM		
Split %	42.0%	58.0%	**43.8%**	48.1%	51.9%	**56.2%**
Peak Hour	10:15	10:00	**10:00**	13:30	13:15	**13:30**
Volume	29	47	**73**	28	37	**64**
P.H.F.	0.91	0.84	**0.91**	0.78	0.66	**0.80**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-007

Location: Cole Grade Rd. Btwn SR-76 & Pauma Valley Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		19				
00:15	4		3					12:15	23		19				
00:30	1		3					12:30	20		9				
00:45	1	8	2	10			18	12:45	18	80	7	54			134
01:00	1		1					13:00	28		17				
01:15	1		9					13:15	16		16				
01:30	2		2					13:30	18		22				
01:45	0	4	4	16			20	13:45	23	85	10	65			150
02:00	0		3					14:00	28		14				
02:15	3		4					14:15	32		7				
02:30	2		3					14:30	18		18				
02:45	3	8	6	16			24	14:45	25	103	19	58			161
03:00	2		4					15:00	20		24				
03:15	0		4					15:15	14		15				
03:30	3		0					15:30	25		19				
03:45	0	5	1	9			14	15:45	19	78	17	75			153
04:00	0		1					16:00	37		28				
04:15	1		0					16:15	15		26				
04:30	3		4					16:30	36		23				
04:45	2	6	2	7			13	16:45	20	108	22	99			207
05:00	1		4					17:00	22		34				
05:15	2		6					17:15	26		12				
05:30	6		10					17:30	24		23				
05:45	8	17	10	30			47	17:45	18	90	12	81			171
06:00	15		10					18:00	19		24				
06:15	24		16					18:15	16		8				
06:30	36		10					18:30	22		13				
06:45	21	96	16	52			148	18:45	18	75	15	60			135
07:00	13		14					19:00	12		22				
07:15	17		18					19:15	13		12				
07:30	20		14					19:30	13		7				
07:45	12	62	17	63			125	19:45	6	44	8	49			93
08:00	15		20					20:00	11		5				
08:15	19		14					20:15	6		9				
08:30	8		13					20:30	16		10				
08:45	15	57	14	61			118	20:45	13	46	14	38			84
09:00	13		6					21:00	19		14				
09:15	8		11					21:15	13		13				
09:30	13		21					21:30	10		10				
09:45	6	40	22	60			100	21:45	6	48	6	43			91
10:00	21		24					22:00	10		6				
10:15	19		23					22:15	7		6				
10:30	17		18					22:30	12		5				
10:45	19	76	16	81			157	22:45	7	36	4	21			57
11:00	18		21					23:00	1		3				
11:15	19		16					23:15	8		9				
11:30	26		17					23:30	7		7				
11:45	14	77	19	73			150	23:45	2	18	8	27			45
Total Vol.		456		478			**934**			811		670			**1481**

Daily Totals

NB	SB	EB	WB	Combined
1267	1148			**2415**

	AM			PM		
Split %	48.8%	51.2%	**38.7%**	54.8%	45.2%	**61.3%**
Peak Hour	06:00	09:30	**10:00**	16:00	16:15	**16:00**
Volume	96	90	**157**	108	105	**207**
P.H.F.	0.67	0.94	**0.87**	0.84	0.77	**0.80**

Volumes for: Thursday, March 17, 2005 City: Valley Center Project #: 05-3112-009

Location: Cole Grade Rd. Btwn Pauma Valley Dr. & Pauma Heights

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		3					12:00	16		21				
00:15	4		4					12:15	21		18				
00:30	0		3					12:30	19		12				
00:45	2	8	2	12			20	12:45	18	74	11	62			136
01:00	1		1					13:00	26		17				
01:15	1		9					13:15	18		21				
01:30	2		2					13:30	22		24				
01:45	0	4	4	16			20	13:45	21	87	13	75			162
02:00	0		3					14:00	23		20				
02:15	3		4					14:15	28		11				
02:30	2		3					14:30	21		17				
02:45	3	8	6	16			24	14:45	18	90	18	66			156
03:00	2		4					15:00	18		26				
03:15	0		4					15:15	12		17				
03:30	3		0					15:30	25		20				
03:45	0	5	1	9			14	15:45	24	79	17	80			159
04:00	0		1					16:00	28		37				
04:15	1		0					16:15	16		26				
04:30	3		3					16:30	34		27				
04:45	2	6	2	6			12	16:45	20	98	23	113			211
05:00	1		4					17:00	24		37				
05:15	3		6					17:15	24		13				
05:30	5		10					17:30	21		25				
05:45	8	17	8	28			45	17:45	15	84	15	90			174
06:00	14		11					18:00	21		23				
06:15	25		15					18:15	15		8				
06:30	37		13					18:30	24		12				
06:45	25	101	15	54			155	18:45	17	77	16	59			136
07:00	16		16					19:00	17		22				
07:15	19		16					19:15	13		13				
07:30	22		16					19:30	11		5				
07:45	11	68	19	67			135	19:45	6	47	7	47			94
08:00	22		21					20:00	14		5				
08:15	16		19					20:15	4		10				
08:30	12		18					20:30	16		9				
08:45	15	65	16	74			139	20:45	12	46	14	38			84
09:00	13		10					21:00	18		16				
09:15	7		14					21:15	14		13				
09:30	14		16					21:30	6		9				
09:45	14	48	26	66			114	21:45	7	45	6	44			89
10:00	0		0					22:00	10		6				
10:15	0		0					22:15	10		6				
10:30	16		20					22:30	11		4				
10:45	15	31	12	32			63	22:45	6	37	3	19			56
11:00	23		24					23:00	1		3				
11:15	18		19					23:15	8		9				
11:30	26		17					23:30	7		6				
11:45	13	80	22	82			162	23:45	1	17	8	26			43
Total Vol.		441		462			**903**			781		719			**1500**

	Daily Totals				
	NB	SB	EB	WB	Combined
	1222	1181			**2403**

	AM			PM		
Split %	48.8%	51.2%	**37.6%**	52.1%	47.9%	**62.4%**
Peak Hour	06:15	11:00	**06:15**	15:45	16:00	**16:00**
Volume	103	82	**162**	102	113	**211**
P.H.F.	0.70	0.85	**0.81**	0.75	0.76	**0.81**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Tuesday, November 04, 2003 City: Valley Center Project #: 03-1576-003

Location: Cole Grade Rd & N/o Fruitvale Rd Client Ref #:

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
12:00-12:15	6		4					12:00-12:15	71		102				
12:15-12:30	14		4					12:15-12:30	91		111				
12:30-12:45	4		8					12:30-12:45	96		76				
12:45-1:00	4	28	7	23			51	12:45-1:00	85	343	103	392			735
1:00-1:15	7		6					1:00-1:15	102		104				
1:15-1:30	3		0					1:15-1:30	77		91				
1:30-1:45	2		1					1:30-1:45	86		70				
1:45-2:00	3	15	0	7			22	1:45-2:00	80	345	69	334			679
2:00-2:15	2		6					2:00-2:15	79		67				
2:15-2:30	6		3					2:15-2:30	86		74				
2:30-2:45	1		4					2:30-2:45	116		86				
2:45-3:00	2	11	4	17			28	2:45-3:00	87	368	86	313			681
3:00-3:15	2		4					3:00-3:15	82		85				
3:15-3:30	0		2					3:15-3:30	86		80				
3:30-3:45	4		3					3:30-3:45	77		66				
3:45-4:00	1	7	2	11			18	3:45-4:00	80	325	86	317			642
4:00-4:15	2		1					4:00-4:15	114		95				
4:15-4:30	3		1					4:15-4:30	111		94				
4:30-4:45	3		4					4:30-4:45	108		102				
4:45-5:00	4	12	11	17			29	4:45-5:00	99	432	82	373			805
5:00-5:15	3		4					5:00-5:15	91		86				
5:15-5:30	4		10					5:15-5:30	110		85				
5:30-5:45	2		11					5:30-5:45	104		83				
5:45-6:00	5	14	25	50			64	5:45-6:00	100	405	88	342			747
6:00-6:15	4		26					6:00-6:15	99		87				
6:15-6:30	8		43					6:15-6:30	107		67				
6:30-6:45	11		52					6:30-6:45	87		63				
6:45-7:00	23	46	69	190			236	6:45-7:00	81	374	48	265			639
7:00-7:15	29		44					7:00-7:15	67		60				
7:15-7:30	68		70					7:15-7:30	45		41				
7:30-7:45	54		89					7:30-7:45	72		47				
7:45-8:00	34	185	85	288			473	7:45-8:00	66	250	27	175			425
8:00-8:15	52		112					8:00-8:15	51		33				
8:15-8:30	40		102					8:15-8:30	48		32				
8:30-8:45	46		79					8:30-8:45	49		18				
8:45-9:00	35	173	88	381			554	8:45-9:00	35	183	28	111			294
9:00-9:15	47		77					9:00-9:15	37		28				
9:15-9:30	51		75					9:15-9:30	35		26				
9:30-9:45	53		74					9:30-9:45	39		17				
9:45-10:00	58	209	79	305			514	9:45-10:00	31	142	19	90			232
10:00-10:15	72		82					10:00-10:15	21		13				
10:15-10:30	60		101					10:15-10:30	23		16				
10:30-10:45	69		97					10:30-10:45	30		16				
10:45-11:00	67	268	101	381			649	10:45-11:00	25	99	14	59			158
11:00-11:15	67		99					11:00-11:15	26		11				
11:15-11:30	70		114					11:15-11:30	12		15				
11:30-11:45	92		104					11:30-11:45	18		12				
11:45-12:00	78	307	94	411			718	11:45-12:00	9	65	6	44			109
Total Vol.		1275		2081	0	0	3356			3331		2815	0	0	6146
Daily Totals										4606		4896	0	0	9502

A 17

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, January 19, 2006 City: Valley Center Project #: 05-4335-008

Location: Cole Grade Rd btwn Valley Center and Fruitvale Rd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	10		6					12:00	143		96				
00:15	10		3					12:15	131		129				
00:30	3		4					12:30	116		221				
00:45	4	27	6	19			46	12:45	97	487	155	601			1088
01:00	6		4					13:00	125		122				
01:15	3		15					13:15	120		120				
01:30	4		2					13:30	143		113				
01:45	9	22	6	27			49	13:45	162	550	118	473			1023
02:00	3		5					14:00	101		150				
02:15	1		3					14:15	95		121				
02:30	4		4					14:30	130		113				
02:45	1	9	1	13			22	14:45	171	497	124	508			1005
03:00	1		2					15:00	152		195				
03:15	3		1					15:15	130		153				
03:30	1		8					15:30	134		134				
03:45	1	6	1	12			18	15:45	137	553	137	619			1172
04:00	4		10					16:00	144		136				
04:15	1		24					16:15	117		120				
04:30	2		27					16:30	144		144				
04:45	7	14	31	92			106	16:45	170	575	122	522			1097
05:00	2		52					17:00	168		130				
05:15	12		66					17:15	150		139				
05:30	25		88					17:30	157		116				
05:45	25	64	75	281			345	17:45	156	631	107	492			1123
06:00	38		106					18:00	139		110				
06:15	59		127					18:15	157		88				
06:30	82		127					18:30	132		92				
06:45	179	358	150	510			868	18:45	134	562	77	367			929
07:00	195		158					19:00	87		49				
07:15	222		197					19:15	99		53				
07:30	103		218					19:30	88		55				
07:45	131	651	186	759			1410	19:45	64	338	66	223			561
08:00	153		178					20:00	54		53				
08:15	143		213					20:15	78		32				
08:30	95		158					20:30	60		50				
08:45	58	449	132	681			1130	20:45	63	255	36	171			426
09:00	78		132					21:00	64		71				
09:15	74		120					21:15	43		36				
09:30	64		90					21:30	36		30				
09:45	70	286	118	460			746	21:45	50	193	23	160			353
10:00	82		116					22:00	38		15				
10:15	76		108					22:15	31		14				
10:30	79		97					22:30	23		7				
10:45	74	311	125	446			757	22:45	27	119	14	50			169
11:00	86		108					23:00	15		10				
11:15	87		93					23:15	23		14				
11:30	101		112					23:30	12		16				
11:45	115	389	113	426			815	23:45	9	59	9	49			108
Total Vol.		2586		3726			**6312**			4819		4235			**9054**

Daily Totals				
NB	SB	EB	WB	Combined
7405	7961			15366

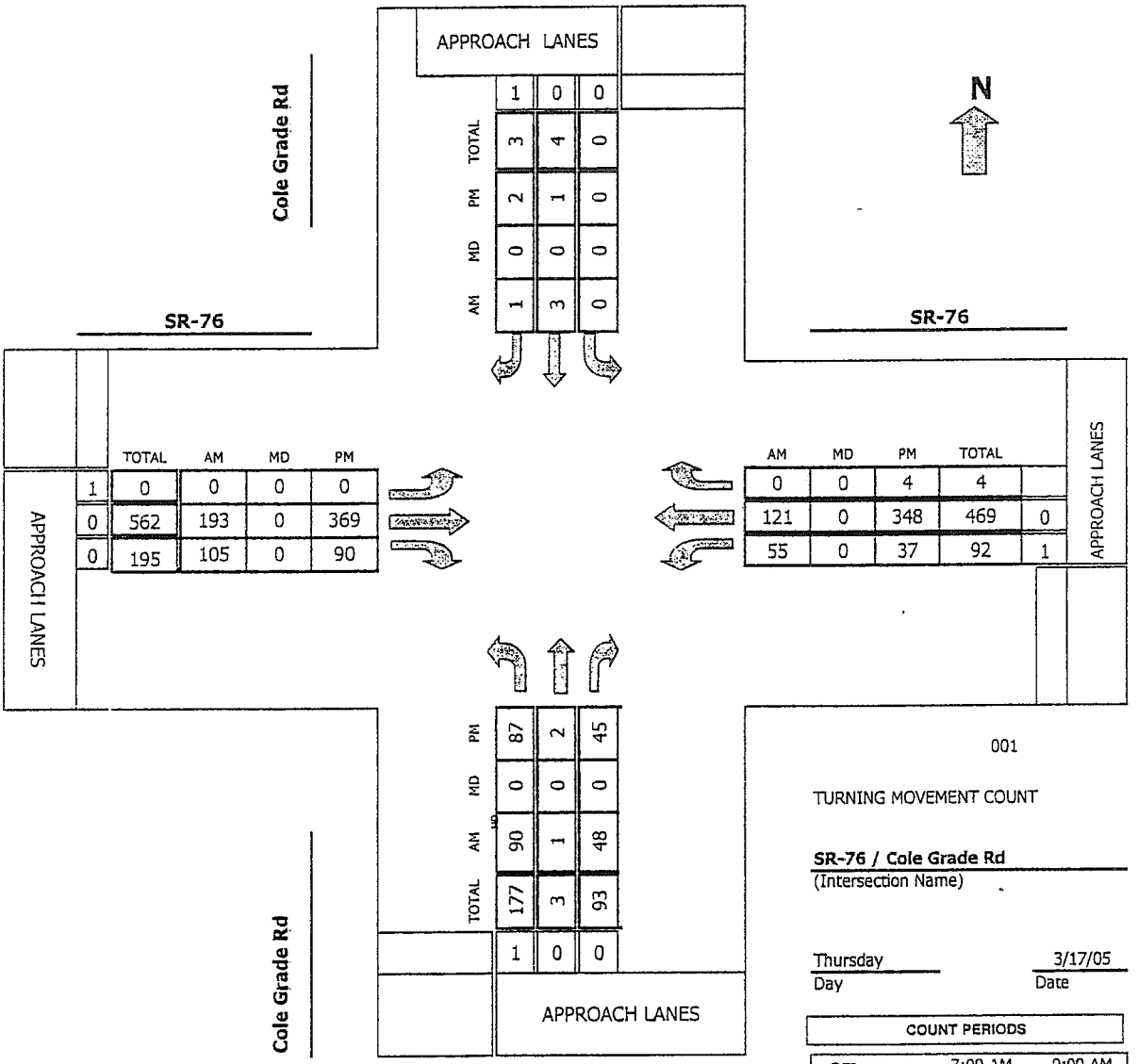
	AM			PM		
Split %	41.0%	59.0%	41.1%	53.2%	46.8%	58.9%
Peak Hour	06:45	07:30	06:45	16:45	12:15	14:45
Volume	699	795	1422	645	627	1193
P.H.F.	0.79	0.91	0.85	0.94	0.71	0.86

A18

050310 &
050311

TMC Summary of Cole Grade Rd/SR-76

Project #: 05-3111-001



001

TURNING MOVEMENT COUNT

SR-76 / Cole Grade Rd
(Intersection Name)

Thursday
Day

3/17/05
Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

A-20a

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Cole Grade Rd DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	1	0	0	1	0	0	1	0		
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	11	0	4		0	0		36	24	12	24		111
7:15 AM	17	0	8		1	1		34	32	21	35		149
7:30 AM	25	1	15		1	0		49	15	11	23		140
7:45 AM	26	0	14		1	0		62	30	15	35		183
8:00 AM	22	0	11		0	0		48	28	8	28		145
8:15 AM	14	0	6		0	0		44	11	8	35		118
8:30 AM	22	0	8		0	0		43	11	5	21		110
8:45 AM	18	0	5		0	0		44	15	3	24		109
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 155	NT 1	NR 71	SL 0	ST 3	SR 1	EL 0	ET 360	ER 166	WL 83	WT 225	WR 0	TOTAL 1065

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	90	1	48	0	3	1	0	193	105	55	121	0	617
PEAK HR. FACTOR:		0.848			0.500			0.810			0.786		0.843

CONTROL: 0

A-206

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Cole Grade Rd DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	1	0	0	1	0	0	1	0		
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	31	1	16	0	1	0		83	31	8	72	0	243
4:15 PM	16	0	11	0	0	1		107	21	9	87	1	253
4:30 PM	21	1	11	0	0	0		95	15	12	101	3	259
4:45 PM	19	0	7	0	0	1		84	23	8	88	0	230
5:00 PM	12	0	0	1	0	0		41	11	0	29	0	94
5:15 PM	10	0	6	0	0	0		49	12	1	35	0	113
5:30 PM	21	2	8	0	0	0		79	20	6	87	1	224
5:45 PM	18	1	4	0	1	0		65	21	5	50	0	165
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 148	NT 5	NR 63	SL 1	ST 2	SR 2	EL 0	ET 603	ER 154	WL 49	WT 549	WR 5	TOTAL 1581

PM Peak Hr Begins at: 400 PM

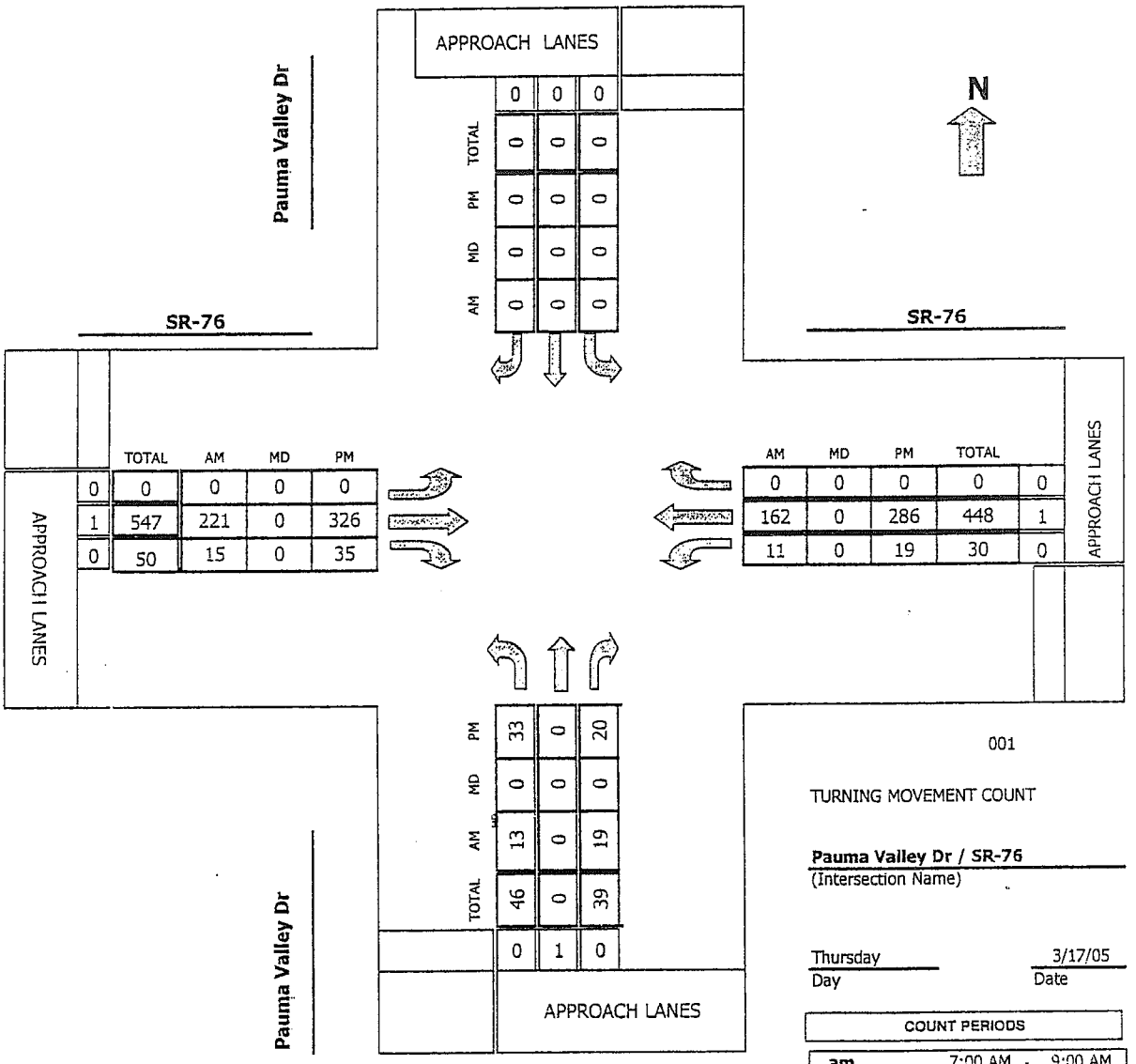
PEAK VOLUMES =	87	2	45	0	1	2	0	369	90	37	348	4	985
PEAK HR. FACTOR:		0.698			0.750			0.896			0.838		0.951

CONTROL: 0

A-20c

TMC Summary of Pauma Valley Dr/SR-76

Project #: 05-3111-002



001

TURNING MOVEMENT COUNT

Pauma Valley Dr / SR-76
(Intersection Name)

Thursday — Day

3/17/05 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	415 PM

A-20d

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Pauma Valley Dr DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2		3					39	2	4	37		87
7:15 AM	1		4					42	3	5	39		94
7:30 AM	5		6					48	3	5	38		105
7:45 AM	2		4					68	7	3	49		133
8:00 AM	3		5					53	3	1	35		100
8:15 AM	3		4					52	2	2	40		103
8:30 AM	5		3					44	7	5	27		91
8:45 AM	10		7					47	9	8	25		106
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	31	0	36	0	0	0	0	393	36	33	290	0	819

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	13	0	19	0	0	0	0	221	15	11	162	0	441
PEAK HR. FACTOR:		0.727			0.000			0.787			0.832		0.829

CONTROL: 1WAYSTOP, (NB)

A-20e

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Pauma Valley Dr DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8		2					70	13	4	66		163
4:15 PM	9		6					84	11	4	69		183
4:30 PM	9		4					89	8	6	65		181
4:45 PM	8		3					81	9	4	86		191
5:00 PM	7		7					72	7	5	66		164
5:15 PM	6		4					73	13	3	71		170
5:30 PM	2		9					56	5	3	66		141
5:45 PM	3		9					75	3	3	61		154
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	52	0	44	0	0	0	0	600	69	32	550	0	1347

PM Peak Hr Begins at: 415 PM

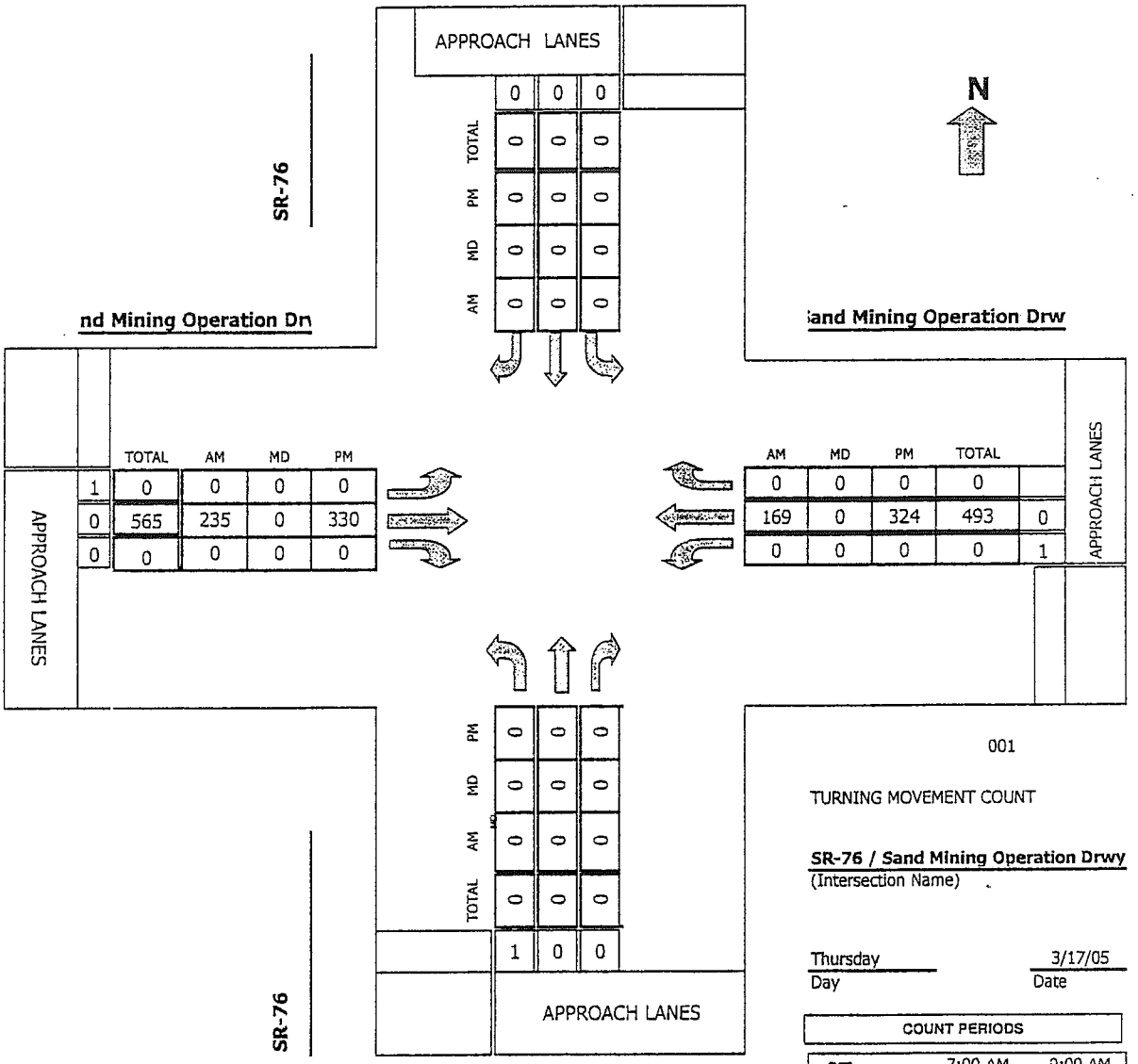
PEAK													
VOLUMES =	33	0	20	0	0	0	0	326	35	19	286	0	719
PEAK HR. FACTOR:		0.883			0.000			0.930			0.847		0.941

CONTROL: 1WAYSTOP, (NB)

A-20f

TMC Summary of SR-76/Sand Mining Operation Drwy

Project #: 05-3111-003



	TOTAL	AM	MD	PM
TOTAL	0	0	0	0
PM	0	0	0	0
MD	0	0	0	0
AM	0	0	0	0

	TOTAL	AM	MD	PM
1	0	0	0	0
0	565	235	0	330
0	0	0	0	0

AM	MD	PM	TOTAL	
0	0	0	0	
169	0	324	493	0
0	0	0	0	1

	TOTAL	AM	MD	PM
PM	0	0	0	0
MD	0	0	0	0
AM	0	0	0	0
TOTAL	0	0	0	0

1	0	0

001

TURNING MOVEMENT COUNT

SR-76 / Sand Mining Operation Drwy
(Intersection Name)

Thursday — Day

3/17/05 — Date

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	4:00 PM -	6:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	415 PM

A-209

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: SR-76 DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: Sand Mining Operation Drwy DAY: THURSDAY PROJECT# 05-3111-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	0	0	0	1	0	0	1	0		
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM								48			43		91
7:15 AM								50			48		98
7:30 AM								58			42		100
7:45 AM								67			46		113
8:00 AM								54			37		91
8:15 AM								56			44		100
8:30 AM								40			37		77
8:45 AM								62			32		94
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	0	0	0	0	435	0	0	329	0	764

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	0	0	0	0	0	0	235	0	0	169	0	404
PEAK HR. FACTOR:		0.000			0.000			0.877			0.918		0.894

CONTROL: 0

A-20h

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: SR-76 DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: Sand Mining Operation Drwy DAY: THURSDAY PROJECT# 05-3111-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	0	0	0	1	0	0	1	0		
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM								79			85		164
4:15 PM								80			101		181
4:30 PM								68			81		149
4:45 PM								96			64		160
5:00 PM								86			78		164
5:15 PM								70			60		130
5:30 PM								80			58		138
5:45 PM								89			57		146
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 0	ST 0	SR 0	EL 0	ET 648	ER 0	WL 0	WT 584	WR 0	TOTAL 1232

PM Peak Hr Begins at: 415 PM

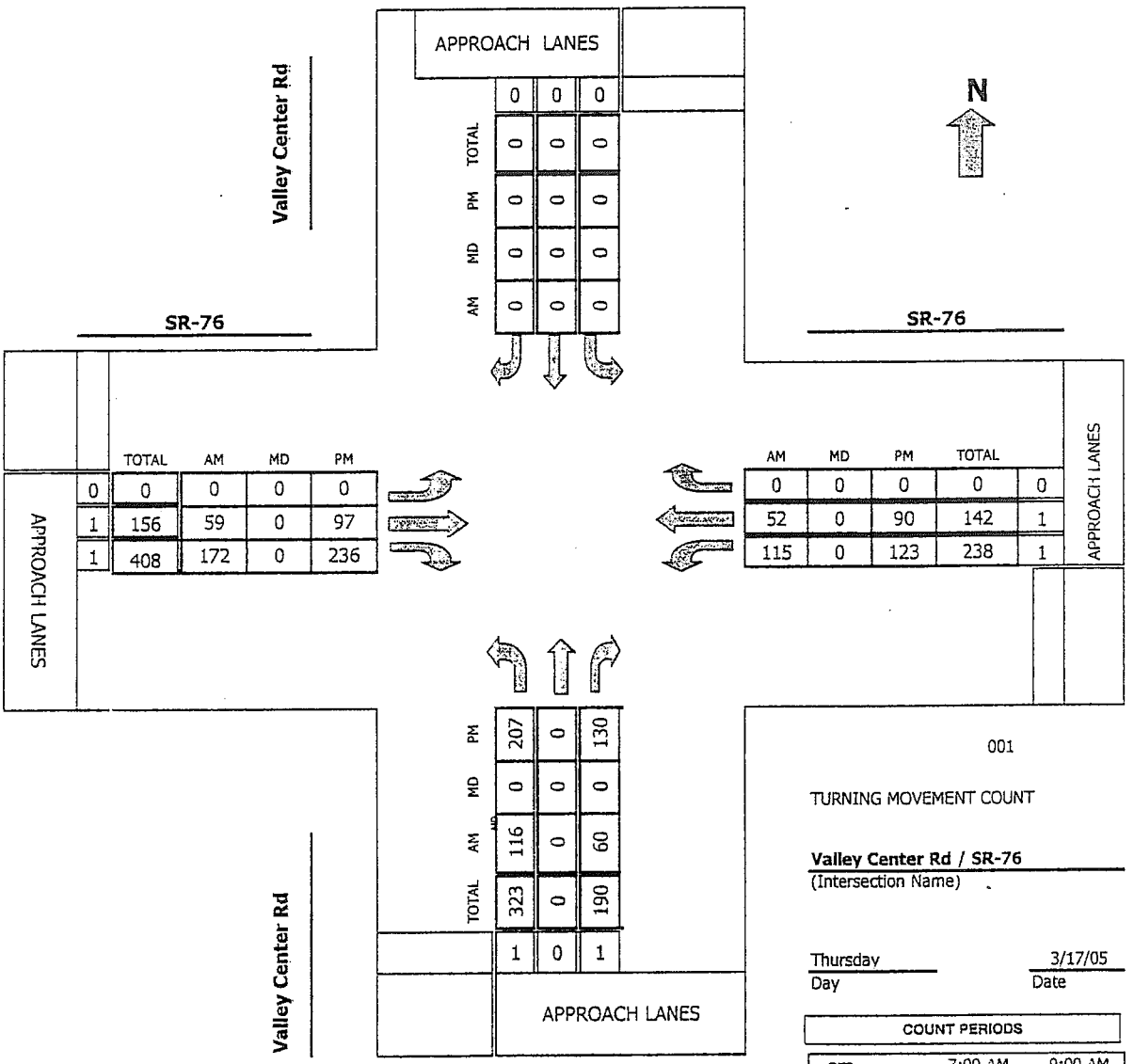
PEAK VOLUMES =	0	0	0	0	0	0	0	330	0	0	324	0	654
PEAK HR. FACTOR:		0.000			0.000			0.859			0.802		0.903

CONTROL: 0

A-20

TMC Summary of Valley Center Rd/SR-76

Project #: 05-3111-004



001

TURNING MOVEMENT COUNT

Valley Center Rd / SR-76
(Intersection Name)

Thursday — Day
3/17/05 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	5:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

A-20j

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Valley Center Rd DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	32		11					12	23	27	15		120
7:15 AM	30		14					19	36	10	10		119
7:30 AM	25		12					17	40	33	19		146
7:45 AM	31		19					14	56	31	14		165
8:00 AM	28		18					12	42	25	11		136
8:15 AM	32		11					16	34	26	8		127
8:30 AM	26		22					13	29	15	11		116
8:45 AM	17		18					17	45	19	9		125
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 221	NT 0	NR 125	SL 0	ST 0	SR 0	EL 0	ET 120	ER 305	WL 186	WT 97	WR 0	TOTAL 1054

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	116	0	60	0	0	0	0	59	172	115	52	0	574
PEAK HR. FACTOR:		0.880			0.000			0.825			0.803		0.870

CONTROL: 1waystop(nb)

A-20k

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Valley Center Rd DATE: 3/17/2005 LOCATION: City of Pauma Valley

E-W STREET: SR-76 DAY: THURSDAY PROJECT# 05-3111-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	60		34					15	45	41	35		230
4:15 PM	47		35					41	32	34	28		217
4:30 PM	56		37					30	65	28	16		232
4:45 PM	44		24					11	94	20	11		204
5:00 PM	59		20					15	59	15	25		193
5:15 PM	36		23					19	42	12	18		150
5:30 PM	36		16					11	26	15	21		125
5:45 PM	51		25					5	41	20	12		154
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	389	0	214	0	0	0	0	147	404	185	166	0	1505

PM Peak Hr Begins at: 400 PM

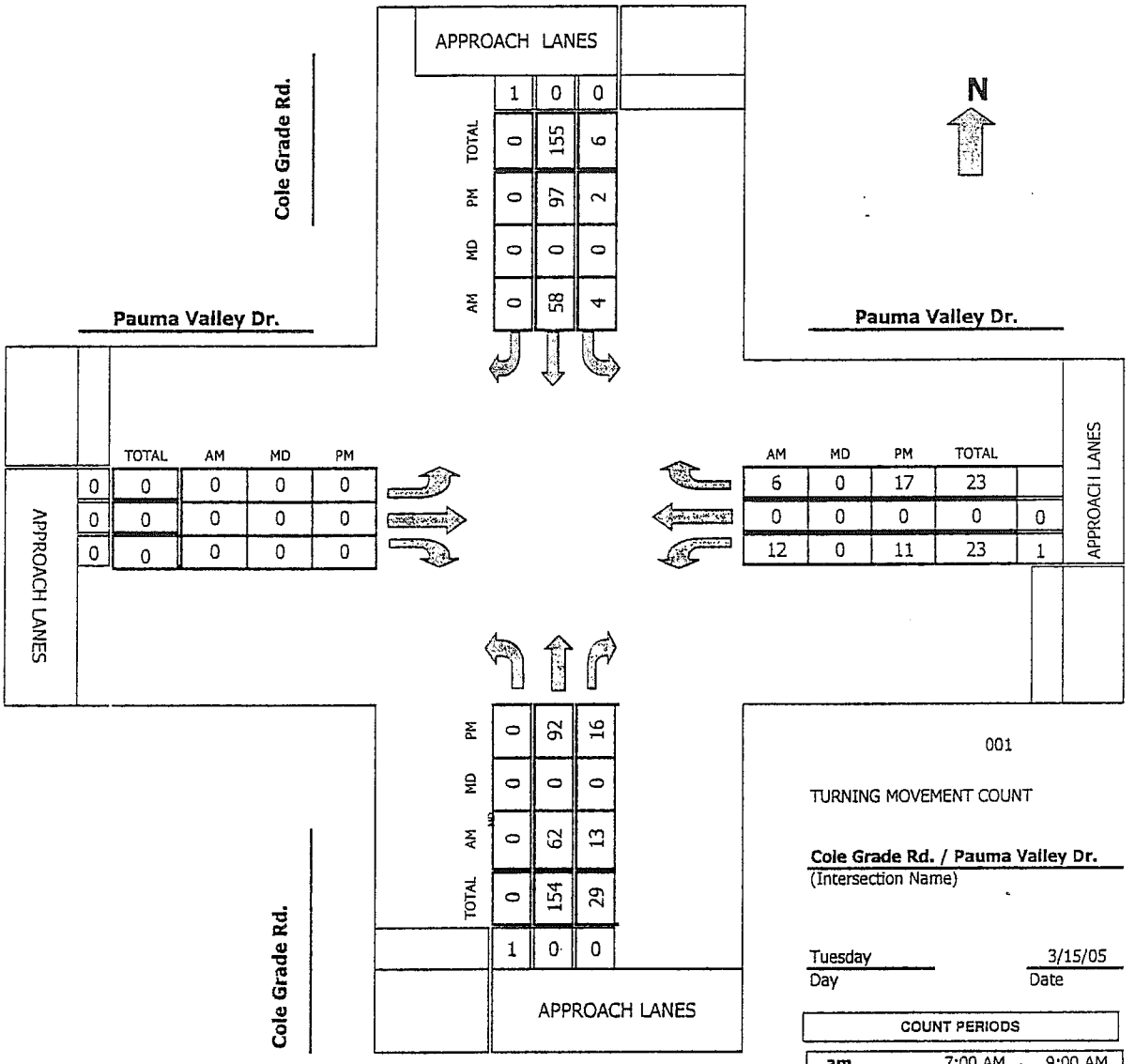
PEAK VOLUMES =	207	0	130	0	0	0	0	97	236	123	90	0	883
PEAK HR. FACTOR:		0.896			0.000			0.793			0.701		0.952

CONTROL: 1waystop(nb)

A-20L

TMC Summary of Cole Grade Rd./Pauma Valley Dr.

Project #: 05-3111-005



1	0	0	
0	155	6	TOTAL
0	97	2	PM
0	0	0	MD
0	58	4	AM

0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	

6	0	17	23	
0	0	0	0	0
12	0	11	23	1

0	92	16	PM
0	0	0	MD
0	62	13	AM
0	154	29	TOTAL
1	0	0	

001

TURNING MOVEMENT COUNT

Cole Grade Rd. / Pauma Valley Dr.
(Intersection Name)

Tuesday — Day

3/15/05 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

A-20 M

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Cole Grade Rd. DATE: 3/15/2005 LOCATION: City of Pauma Valley

E-W STREET: Pauma Valley Dr. DAY: TUESDAY PROJECT# 05-3111-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	1	0	0	0	0	0	1	0		
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		11	5	0	14					2		2	34
7:15 AM		17	2	2	16					1		0	38
7:30 AM		20	2	0	14					2		0	38
7:45 AM		13	2	0	14					2		3	34
8:00 AM		15	7	2	18					3		0	45
8:15 AM		14	2	2	12					5		3	38
8:30 AM		12	4	0	10					8		0	34
8:45 AM		11	4	0	14					2		4	35
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 113	NR 28	SL 6	ST 112	SR 0	EL 0	ET 0	ER 0	WL 25	WT 0	WR 12	TOTAL 296

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	62	13	4	58	0	0	0	0	12	0	6	155
PEAK HR. FACTOR:		0.852			0.775			0.000			0.563		0.861

CONTROL: 0

A-20N

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Cole Grade Rd. DATE: 3/15/2005 LOCATION: City of Pauma Valley

E-W STREET: Pauma Valley Dr. DAY: TUESDAY PROJECT# 05-3111-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	0	1	0	0	0	0	0	1	0		
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM		25	3	2	26					5	9		70
4:15 PM		23	3	0	26					1	1		54
4:30 PM		27	7	0	23					4	6		67
4:45 PM		17	3	0	22					1	1		44
5:00 PM		20	4	0	34					3	0		61
5:15 PM		21	3	0	12					1	3		40
5:30 PM		21	0	2	21					4	1		49
5:45 PM		14	1	1	11					4	2		33
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 168	NR 24	SL 5	ST 175	SR 0	EL 0	ET 0	ER 0	WL 23	WT 0	WR 23	TOTAL 418

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	0	92	16	2	97	0	0	0	0	11	0	17	235
PEAK HR. FACTOR:		0.794			0.884			0.000			0.500		0.839

CONTROL: 0

A-20 0

SANDAG Trip Generation Rates

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

SANDAG
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a ***guide*** of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. ***Always check with local jurisdictions for their preferred or applicable rates.***

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY][B]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[A]
AGRICULTURE (Open Space)	[80:18:2]	2/acre**					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.* **	5%	(6:4)	8%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft* **	9%	(7:3)	15%	(5:5)	
Heliports		100/acre**					
AUTOMOBILE[S]							
Car Wash							
Automatic		900/site, 600/acre**	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall**	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space**	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall* **	5%	(7:3)	8%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft.**	4%		10%		
Quick Lube		40/service stall**	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre*					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL[S]							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)		35/1000 sq. ft.,[C] 400/acre*	4%	(7:3)	10%	(5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2+ major stores)	[54:35:11]	50/1000 sq. ft.,[C] 500/acre*	4%	(7:3)	9%	(5:5)	5.2
Community Shopping Center (15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)	[47:31:22]	80/1000 sq. ft., 700/acre* **	4%	(6:4)	10%	(5:5)	3.6
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)		120/1000 sq. ft., 1200/acre* **	4%	(6:4)	10%	(5:5)	
Commercial Shops	[45:40:15]						
Specialty Retail/Strip Commercial		40/1000 sq. ft., 400/acre*	3%	(6:4)	9%	(5:5)	4.3
Electronics Superstore		50/1000 sq. ft**			10%	(5:5)	
Factory Outlet		40/1000 sq. ft.**	3%	(7:3)	9%	(5:5)	
Supermarket		150/1000 sq. ft., 2000/acre* **	4%	(7:3)	10%	(5:5)	
Drugstore		90/1000 sq. ft.**	4%	(6:4)	10%	(5:5)	
Convenience Market (15-16 hours)		500/1000 sq. ft.**	8%	(5:5)	8%	(5:5)	
Convenience Market (24 hours)		700/1000 sq. ft.**	9%	(5:5)	7%	(5:5)	
Convenience Market (w/gasoline pumps)		850/1000 sq. ft., 550/vehicle fueling space**	6%	(5:5)	7%	(5:5)	
Discount Club		60/1000 sq. ft., 600/acre* **	1%	(7:3)	9%	(5:5)	
Discount Store		60/1000 sq. ft., 600/acre**	3%	(6:4)	8%	(5:5)	
Furniture Store		6/1000 sq. ft., 100/acre**	4%	(7:3)	9%	(5:5)	
Lumber Store		30/1000 sq. ft., 150/acre**	7%	(6:4)	9%	(5:5)	
Home Improvement Superstore		40/1000 sq. ft.**	5%	(6:4)	8%	(5:5)	
Hardware/Paint Store		60/1000 sq. ft., 600/acre**	2%	(6:4)	9%	(5:5)	
Garden Nursery		40/1000 sq. ft., 90/acre**	3%	(6:4)	10%	(5:5)	
Mixed Use: Commercial (w/supermarket)/Residential		110/1000 sq. ft., 2000/acre* (commercial only) 5/dwelling unit, 200/acre* (residential only)	3% 9%	(6:4) (3:7)	9% 13%	(5:5) (6:4)	
EDUCATION							
University (4 years)	[91:9:0]	2.4/student, 100 acre*	10%	(8:2)	9%	(3:7)	8.9
Junior College (2 years)	[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acre* **	12%	(8:2)	9%	(6:4)	9.0
High School	[75:19:6]	1.3/student, 15/1000 sq. ft., 60/acre* **	20%	(7:3)	10%	(4:6)	4.8
Middle/Junior High	[63:25:12]	1.4/student, 12/1000 sq. ft. 50/acre**	30%	(6:4)	9%	(4:6)	5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/acre* **	32%	(6:4)	9%	(4:6)	3.4
Day Care	[28:58:14]	5/child, 80/1000 sq. ft.**	17%	(5:5)	18%	(5:5)	3.7
FINANCIAL[S]	[35:42:23]						3.4
Bank (Walk-In only)		150/1000 sq. ft., 1000/acre* **	4%	(7:3)	8%	(4:6)	
with Drive-Through		200/1000 sq. ft., 1500/acre*	5%	(6:4)	10%	(5:5)	
Drive-Through only		250 (125 one-way)/lane*	3%	(5:5)	13%	(5:5)	
Savings & Loan		60/1000 sq. ft., 600/acre**	2%		9%		
Drive-Through only		100 (50 one-way)/lane**	4%		15%		
HOSPITAL	[73:25:2]						8.3
General		20/bed, 25/1000 sq. ft., 250/acre*	8%	(7:3)	10%	(4:6)	
Convalescent/Nursing		3/bed**	7%	(6:4)	7%	(4:6)	
INDUSTRIAL							
Industrial/Business Park (commercial included)	[79:19:2]	16/1000 sq. ft., 200/acre* **	12%	(8:2)	12%	(2:8)	9.0
Industrial Park (no commercial)		8/1000 sq. ft., 90/acre**	11%	(9:1)	12%	(2:8)	
Industrial Plant (multiple shifts)	[92:5:3]	10/1000 sq. ft., 120/acre*	14%	(8:2)	15%	(3:7)	11.7
Manufacturing/Assembly		4/1000 sq. ft., 50/acre**	19%	(9:1)	20%	(2:8)	
Warehousing		5/1000 sq. ft., 60/acre**	13%	(7:3)	15%	(4:6)	
Storage		2/1000 sq. ft., 0.2/vault, 30/acre*	8%	(5:5)	9%	(5:5)	
Science Research & Development		8/1000 sq. ft., 80/acre*	16%	(9:1)	14%	(1:9)	
Landfill & Recycling Center		6/acre	11%	(5:5)	10%	(4:6)	

(OVER)

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY][7]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[1]
LIBRARY	[44:44:12]	50/1000 sq. ft., 400/acre**	2%	(7:3)	10%	(5:5)	3.9
LODGING	[58:38:4]						7.6
Hotel (w/convention facilities/restaurant)		10/occupied room, 300/acre	6%	(6:4)	8%	(6:4)	
Motel		9/occupied room, 200/acre*	8%	(4:6)	9%	(6:4)	
Resort Hotel		8/occupied room, 100/acre*	5%	(6:4)	7%	(4:6)	
Business Hotel		7/occupied room**	8%	(4:6)	9%	(6:4)	
MILITARY	[82:16:2]	2.5/military & civilian personnel*	9%	(9:1)	10%	(2:8)	11.2
OFFICE							
Standard Commercial Office (less than 100,000 sq. ft.)	[77:19:4]	20/1000 sq. ft.,[D] 300/acre*	14%	(9:1)	13%	(2:8)	8.8
Large (High-Rise) Commercial Office (more than 100,000 sq. ft., 6+ stories)	[82:15:3]	17/1000 sq. ft.,[D] 600/acre*	13%	(9:1)	14%	(2:8)	10.0
Office Park (400,000+ sq. ft.)		12/1000 sq.ft., 200/acre* **	13%	(9:1)	13%	(2:8)	
Single Tenant Office		14/1000 sq. ft., 180/acre*	15%	(9:1)	15%	(2:8)	8.8
Corporate Headquarters		7/1000 sq. ft., 110/acre*	17%	(9:1)	16%	(1:9)	
Government (Civic Center)	[50:34:16]	30/1000 sq. ft.**	9%	(9:1)	12%	(3:7)	6.0
Post Office							
Central/Walk-In Only		90/1000 sq. ft.**	5%		7%		
Community (not including mail drop lane)		200/1000 sq. ft., 1300/acre*	6%	(6:4)	9%	(5:5)	
Community (w/mail drop lane)		300/1000 sq. ft., 2000/acre*	7%	(5:5)	10%	(5:5)	
Mail Drop Lane only		1500 (750 one-way)/lane*	7%	(5:5)	12%	(5:5)	
Department of Motor Vehicles		180/1000 sq. ft., 900/acre**	6%	(6:4)	10%	(4:6)	
Medical-Dental	[60:30:10]	50/1000 sq. ft., 500/acre*	8%	(8:2)	11%	(3:7)	6.4
PARKS	[66:28:6]		4%		8%		5.4
City (developed w/meeting rooms and sports facilities)		50/acre*	13%	(5:5)	9%	(5:5)	
Regional (developed)		20/acre*					
Neighborhood/County (undeveloped)		5/acre (add for specific sport uses), 6/picnic site* **					
State (average 1000 acres)		1/acre, 10/picnic site**					
Amusement (Theme)		80/acre, 130/acre (summer only)**			6%	(6:4)	
San Diego Zoo		115/acre*					
Sea World		80/acre*					
RECREATION							
Beach, Ocean or Bay	[52:39:9]	600/1000 ft. shoreline, 60/acre*					6.3
Beach, Lake (fresh water)		50/1000 ft. shoreline, 5/acre*					
Bowling Center		30/1000 sq. ft., 300/acre, 30/lane **	7%	(7:3)	11%	(4:6)	
Campground		4/campsite**	4%		8%		
Golf Course		7/acre, 40/hole, 700/course* **	7%	(8:2)	9%	(3:7)	
Driving Range only		70/acre, 14/tee box*	3%	(7:3)	9%	(5:5)	
Marinas		4/berth, 20/acre* **	3%	(3:7)	7%	(6:4)	
Multi-purpose (miniature golf, video arcade, batting cage, etc.)		90/acre	2%		6%		
Racquetball/Health Club		30/1000 sq. ft., 300/acre, 40/court*	4%	(6:4)	9%	(6:4)	
Tennis Courts		16/acre, 30/court**	5%		11%	(5:5)	
Sports Facilities							
Outdoor Stadium		50/acre, 0.2/seat*					
Indoor Arena		30/acre, 0.1/seat*					
Racetrack		40/acre, 0.6 seat*					
Theaters (multiplex w/matinee)	[66:17:17]	80/1000 sq. ft., 1.8/seat, 360/screen*	1/3%		8%	(6:4)	6.1
RESIDENTIAL	[86:11:3]						7.9
Estate, Urban or Rural (average 1-2 DU/acre)		12/dwelling unit *[R]	8%	(3:7)	10%	(7:3)	
Single Family Detached (average 3-6 DU/acre)		10/dwelling unit *[R]	8%	(3:7)	10%	(7:3)	
Condominium (or any multi-family 6-20 DU/acre)		8/dwelling unit *[R]	8%	(2:8)	10%	(7:3)	
Apartment (or any multi-family units more than 20 DU/acre)		6/dwelling unit *[R]	8%	(2:8)	9%	(7:3)	
Military Housing (off-base, multi-family)							
(less than 6 DU/acre)		8/dwelling unit	7%	(3:7)	9%	(6:4)	
(6-20 DU/acre)		6/dwelling unit	7%	(3:7)	9%	(6:4)	
Mobile Home							
Family		5/dwelling unit, 40/acre*	8%	(3:7)	11%	(6:4)	
Adults Only		3/dwelling unit, 20/acre*	9%	(3:7)	10%	(6:4)	
Retirement Community		4/dwelling unit**	5%	(4:6)	7%	(6:4)	
Congregate Care Facility		2.5/dwelling unit**	4%	(6:4)	8%	(5:5)	
RESTAURANT[5]	[51:37:12]						4.7
Quality		100/1000 sq. ft., 3/seat, 500/acre* **	1%	(6:4)	8%	(7:3)	
Sit-down, high turnover		160/1000 sq. ft., 6/seat, 1000/acre* **	8%	(5:5)	8%	(6:4)	
Fast Food (w/drive-through)		650/1000 sq. ft., 20/seat, 3000/acre* **	7%	(5:5)	7%	(5:5)	
Fast Food (without drive-through)		700/1000 sq. ft.**	5%	(6:4)	7%	(5:5)	
Delicatessen (7am-4pm)		150/1000 sq. ft., 11/seat*	9%	(6:4)	3%	(3:7)	
TRANSPORTATION							
Bus Depot		25/1000 sq. ft.**					
Truck Terminal		10/1000 sq. ft., 7/bay, 80/acre**	9%	(4:6)	8%	(5:5)	
Waterport/Marine Terminal		170/berth, 12/acre**					
Transit Station (Light Rail w/parking)		300/acre, 2[1/2]/parking space (4/occupied)**	14%	(7:3)	15%	(3:7)	
Park & Ride Lots		400/acre (600/paved acre), 5/parking space (8/occupied)* **	14%	(7:3)	15%	(3:7)	

* Primary source: *San Diego Traffic Generators.*

* Other sources: *ITE Trip Generation Report [6th Edition]*, Trip Generation Rates (other agencies and publications), various SANDAG & CALTRANS studies, reports and estimates.

[7] Trip category percentage ratios are daily from local household surveys, often cannot be applied to very specific land uses, and do not include non-resident drivers (draft SANDAG *Analysis of Trip Diversion*, revised November, 1990):
PRIMARY - one trip directly between origin and primary destination.
DIVERTED - linked trip (having one or more stops along the way to a primary destination) whose distance compared to direct distance ≥ 1 mile.
PASS-BY - undiverted or diverted < 1 mile.

[1] Trip lengths are average weighted for all trips to and from general land use site. (All trips system-wide average length = 6.9 miles)

[C] Fitted curve equation: $Ln(T) = 0.502\ Ln(x) + 6.945$

[D] Fitted curve equation: $Ln(T) = 0.756\ Ln(x) + 3.950$

T = total trips, x = 1,000 sq. ft.

[R] Fitted curve equation: $t = -2.169\ Ln(d) + 12.85$ t = trips/DU, d = density (DU/acre), DU = dwelling unit

[5] Suggested PASS-BY [undiverted or diverted < 1 mile] percentages for trip rate reductions only during P.M. peak period (based on combination of local data/review and Other sources**):

COMMERCIAL/RETAIL	
Regional Shopping Center	20%
Community " "	30%
Neighborhood " "	40%
Specialty Retail/Strip Commercial (other)	10%
Supermarket	40%
Convenience Market	50%
Discount Club/Store	30%
FINANCIAL	
Bank	25%
AUTOMOBILE	
Gasoline Station	50%
RESTAURANT	
Quality	10%
Sit-down high turnover	20%
Fast Food	40%

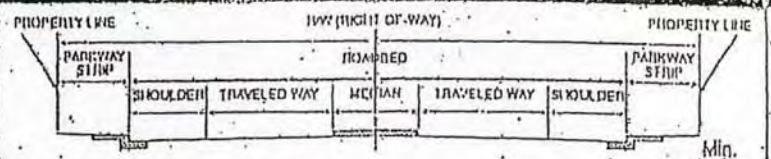
[T] Trip Reductions - In order to help promote regional "smart growth" policies, and acknowledge San Diego's expanding mass transit system, consider vehicle trip rate reductions (with proper documentation and necessary adjustments for peak periods). The following are some examples:

[1] A 5% daily trip reduction for land uses with transit access or near transit stations accessible within 1/4 mile.

[2] Up to 10% daily trip reduction for mixed-use developments where residential and commercial retail are combined (demonstrate mode split of walking trips to replace vehicular trips).

County of San Diego Level of Service Thresholds

SUMMARY OF COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS†



CLASS	CIRCULATION ELEMENT ROAD CROSS SECTIONS									AVERAGE DAILY VEHICLE TRIPS (ADT)				
										LEVEL OF SERVICE (LOS)				
	Median	Traveled way	Shoulder	Parkway strip	Roadbed	R/W	Min. curve radius	Max. grades	Min. design speed (mph)	A Free flow	B Steady flow	C Stable flow	D Approach unstable	E Unstable flow
EXPRESSWAY Divided highway with only selected public road access with full grade separations	34'	36'	10'	10'	126'	146'	1200'	6%	55	<36,000	<54,000	<70,000	<86,000	<100,000
PRIME ARTERIAL Divided highway, signalized intersections, access control, or extra lanes as required	14'	36'	8'	10'	102'	122'	1200'	6%	55	<22,200	<37,000	<44,600	<50,000	<57,000
MAJOR ROAD 4-lane divided road, access & parking controlled as necessary	14'	24'	8'	10'	76'	90'	1200'	7%	55	<14,800	<24,700	<29,600	<33,400	<37,000
COLLECTOR 4-lane undivided road	—	24'	8'	10'	64'	84'	700'	7%	45	<13,700	<22,800	<27,400	<30,800	<34,200
LIGHT COLLECTOR 2-lane undivided road	—	12'	8'	10'	40'	60'	700'	9%	45	<1,900	<4,100	<7,100	<10,900	<16,200
RURAL COLLECTOR 2-lane undivided road, extra R/W allows greater flexibility & upgrade	—	12'	8'	22'	40'	84'	500'	12%	40	<1,900	<4,100	<7,100	<10,900	<16,200
RURAL LIGHT COLLECTOR 2-lane undivided road, decreased "curve radii" standards	—	12'	8'	10'	40'	60'	500'	12%	40	<1,900	<4,100	<7,100	<10,900	<16,200
RURAL MOUNTAIN 2-lane undivided road appropriate only in rural mountain areas	—	12'	8'	30'	40'	100'	500'	12%	40	<1,900	<4,100	<7,100	<10,900	<16,200
RECREATIONAL PARKWAY Recreational routes for travel pleasure purposes	—	12'	8'	30'	40'	100'	400'	12%	25	<1,900	<4,100	<7,100	<10,900	<16,200
NON-CIRCULATION ROADS														
RESIDENTIAL COLLECTOR	—	12'	8'	10'	40'	60'	300'	12%	30	<4,500				
RESIDENTIAL STREET	—	12'	6'	10'	36'	56'	200'	15%	30	<1,500				
RESIDENTIAL LOOP/CUL-DE-SAC	—	12'	4'	10'	32'	52'	200'	15%	30	<200				

Levels of service are not applied to non-circulation roads since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors. Not all non-circulation road classifications are shown.

*Additional pavement and R/W may be required for C.E. Collectors and I.I. Collectors in Industrial/Commercial Zones, 4 and 12 ft., respectively C.E. roads needing additional turn lanes require an additional 12 ft-14 ft of pavement and R/W for each lane. C.E. roads designated with five lanes will require an additional 10 ft. of pavement and R/W.

†For full standards, refer to Public Road Standards, adopted by the Board of Supervisors on 4/26/97

TABLE 1

AVERAGE DAILY VEHICLE TRIPS

CIRCULATION ELEMENT ROADS		LEVEL OF SERVICE				
CLASS	X-SECTION	A	B	C	D	E
Expressway	126/146	<36,000	<54,000	<70,000	<86,000	<108,000
Prime Arterial	102/122	<22,200	<37,000	<44,600	<50,000	<57,000
Major Road	78/98	<14,800	<24,700	<29,600	<33,400	<37,000
Collector	64/84	<13,700	<22,800	<27,400	<30,800	<34,200
Town Collector	54/74	<3,000	<6,000	<9,500	<13,500	<19,000
Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Collector	40/84	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Light Collector	40/60	<1,900	<4,100	<7,100	<10,900	<16,200
Recreational Parkway	40/100	<1,900	<4,100	<7,100	<10,900	<16,200
Rural Mountain	40/100	<1,900	<4,100	<7,100	<10,900	<16,200

NON – CIRCULATION ELEMENT ROADS		LEVEL OF SERVICE				
CLASS	X-SECTION	A	B	C	D	E
Residential Collector	40/60	*	*	<4,500	*	*
Residential Road	36/56	*	*	<1,500	*	*
Residential Cul-de-sac or Loop Road	32/52	*	*	< 200	*	*

*Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

Excerpts from the *Public Facilities Element*

Part XII
Public Facility Element

San Diego County General Plan

Adopted
March 13, 1991
GPA 90-FE
Amended
June 10, 1992
GPA92-FE1

This Element was partially funded through the Community Development Block Grant program

ISSUES

1. Increases in the amount of automobile use have resulted in increased congestion on the region's roadways.

   Discussion: The dramatic rise in automobile use has far surpassed the ability of the County and other jurisdictions to upgrade and maintain the highway and road system. As the number of vehicles on the roadways has increased, the expansion of existing roadways and the construction of new roadways has not kept pace. Between 1978 and 1988, automobile registrations increased by 64% while increases in local street and road mileage only rose by 16%. As a result, certain roadways are functioning at a Level of Service "E" or "F" on a routine basis.

   A LOS "C", which allows for stable traffic flow with room to maneuver, is a generally accepted level to strive for in new development. At this level, traffic generally flows smoothly, although freedom to maneuver within the roadway is somewhat restricted and lane changes require additional care.

   However, there are some cases where development cannot achieve a LOS "C" on off-site roadways. For instance, there are areas where the existing development pattern precludes the addition of lanes or other mitigation or when the community is opposed to certain improvements to maintain a LOS "C". Additionally, there are existing roadways in the County that are currently operating below a LOS "C". Such cases are currently exceptions and generally occur when there is insufficient right-of-way to expand or modify a roadway or when the existing development in the area has generated more traffic than anticipated. In these cases a Level of Service "D" is acceptable on off-site roadways. At this level, small increases in flow cause substantial deterioration in service. Freedom to maneuver is limited and minor incidents can cause substantial interruption in the traffic flow.

   When the roadway system reaches a LOS "E" or "F", or new development would push it to LOS "E" or "F", new development should not be approved unless the project can mitigate the LOS "E" or contribute a fair share to a program to mitigate the project's impacts, unless a statement of overriding findings can be made.

   In order to control the amount of traffic on the roadways, and subsequently the amount of congestion, it is necessary to apply the LOS measurement to all roads that are impacted by a proposed project. The effect of a project on the road system varies from project to project. Due to the size and type of project, the type and capacity of roads serving the project, the amount of traffic generated by the development and the existing development pattern, the impact will vary from one project to another. To apply a LOS standard to only major or larger capacity roads or to within a specified geographic distance of a project could result in an inadequate review of the impacts of a project and create the potential for increased congestion. Therefore, project impacts should be assessed on a case-by-case basis.

GOAL

A SAFE, CONVENIENT, AND ECONOMICAL INTEGRATED TRANSPORTATION SYSTEM INCLUDING A WIDE RANGE OF TRANSPORTATION MODES.

OBJECTIVE 1:

A Level of Service "C" or better on County Circulation Element roads.

Policy 1.1: New development shall provide needed roadway expansion and improvements on-site to meet the demand created by the development, and to maintain a Level of Service "C" on Circulation Element Roads during peak traffic hours. New development shall provide off-site improvements designed to contribute to the overall achievement of a Level of Service "D" on Circulation Element Roads.

Implementation Measure 1.1.1: Review all development proposals to determine both their short-term and long-term impacts on the roadway system. The area of impact will be determined based on the size, type and location of the project; the traffic generated by the project; and the existing circulation and development pattern in the area. [DPW, DPLU]

Implementation Measure 1.1.2: Require, as a condition of approval of discretionary projects, improvements or other measures necessary to mitigate traffic impacts to avoid reduction in the existing Level of Service below "C" on on-site Circulation Element roads. [DPLU, DPW]

Implementation Measure 1.1.3: Require, as a condition of approval of discretionary projects which have a significant impact on roadways, improvements or other measures necessary to mitigate traffic impacts to avoid reduction in the existing Level of Service below "D" on off-site and on-site abutting Circulation Element roads. New development that would significantly impact congestion on roads at LOS "E" or "F", either currently or as a result of the project, will be denied unless improvements are scheduled to increase the LOS to "D" or better or appropriate mitigation is provided . Appropriate mitigation would include a fair share contribution in the form of road improvements or a fair share contribution to an established program or project. If impacts cannot be mitigated, the project will be denied unless a specific statement of overriding findings is made pursuant to Section 15091(b) and 15093 of the State CEQA Guidelines. [DPLU, DPW]

Implementation Measure 1.1.4: Whenever possible on development proposals, require that access to parcels adjacent to roads shown on the Circulation Element be limited to side streets in order to maintain through traffic flow. [DPW, DPLU]

County's *Guidelines for Determining Significance* (Sept. 26 2006)

COUNTY OF SAN DIEGO

GUIDELINES FOR DETERMINING SIGNIFICANCE

TRANSPORTATION AND TRAFFIC

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

September 26, 2006

APPROVAL

I hereby certify that these **Guidelines for Determining Significance and Report Format and Content Requirements for Transportation and Traffic** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the 26th day of September, 2006.

GARY PRYOR
Director of Planning and Land Use

JOHN SNYDER
Director of Public Works

Attest: ERIC GIBSON
Deputy Director of Planning and Land Use

I hereby certify that these **Guidelines for Determining Significance and Report Format and Content Requirements for Transportation and Traffic** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and have hereby been approved by the Deputy Chief Administrative Officer (DCAO) of the Land Use and Environment Group on the 26th day of September, 2006. The Director of Planning and Land Use is authorized to approve revisions to these Guidelines for Determining Significance and Report Format and Content Requirements for Transportation and Traffic, except any revisions to Chapter 4.0 of the Guidelines for Determining Significance for Cultural Resources must be approved by the Deputy CAO.

Approved, September 26, 2006

CHANDRA WALLAR
Deputy CAO

3.4 Hazards to Pedestrians or Bicyclists

Increased traffic generated or redistributed by a proposed project may cause a significant traffic operational impact to pedestrians or bicyclists and result in potential hazards. These hazards can occur for a variety reasons including:

- A design feature or physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists;

- High amount of pedestrian activity at the project access points.

- Precluding or substantially hindering of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.

- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers may result in vehicle/pedestrian, vehicle/bicycle conflicts.

- The project may result in a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

3.5 Parking Capacity

Typical adverse effects on parking occur when an adequate number of spaces are not incorporated in a project design. The regulations are intended to require adequate off-street parking and loading, thereby reducing traffic congestion, allowing more efficient utilization of on-street parking, promoting more efficient loading operations, and reducing the use of public streets for loading purposes. Additionally, the regulations are intended to minimize the secondary effects of vehicles. These may include vehicular noise or visual impacts from headlights and unscreened parked vehicles. Unscreened parked vehicles are a particular concern when parking adjoins or is adjacent to residential areas or preserve systems that are sensitive to noise and lighting.

4.0 GUIDELINES FOR DETERMINING IMPACT SIGNIFICANCE

This section provides guidance for evaluating adverse environmental effects a project may have on traffic. The guidelines for determining significance are organized into eight categories: road segments, intersections, ramps, congestion management plan, hazards due to an existing transportation design feature, hazards to pedestrians or bicyclists, parking capacity, and alternative transportation. A discussion of how to evaluate project and cumulative level impacts is also included in the Transportation and Traffic Report Format and Content Requirement.

4.1 Road Segments

Pursuant to the County's General Plan Public Facilities Element (PFE), new development must provide improvements or other measures to mitigate traffic impacts to avoid:

(a) Reduction in Level of Service (LOS) below "C" for on-site Circulation Element roads;

(b) Reduction in LOS below "D" for off-site and on-site abutting Circulation Element roads; and

(c) "Significantly impacting congestion" on roads that operate at LOS "E" or "F". If impacts cannot be mitigated, the project will be denied unless a statement of overriding findings is made pursuant to the State CEQA Guidelines. The PFE, however, does not include specific guidelines/thresholds for determining the amount of additional traffic that would "significantly impact congestion" on such roads, as that phrase is used in item (c) above.

The County has created the following guidelines to evaluate likely traffic impacts of a proposed project for road segments and intersections serving that project site, for purposes of determining whether the development would "significantly impact congestion" on the referenced LOS E and F roads. The guidelines are summarized in Table 1. The thresholds in Table 1 are based upon average operating conditions on County roadways. It should be noted that these thresholds only establish general guidelines, and that the specific project location must be taken into account in conducting an analysis of traffic impact from new development.

On-site Circulation Element Roads

PFE, Transportation, Policy 1.1 states that "new development shall provide needed roadway expansion and improvements on-site to meet demand created by the development, and to maintain a Level of Service C on Circulation Element Roads during peak traffic hours". Pursuant to this policy, a significant traffic impact would result if:

- ***The additional or redistributed ADT generated by the proposed land development project will cause on-site Circulation Element Roads to operate below LOS C during peak traffic hours except within the Otay Ranch project as defined in the Otay Subregional Plan Text, Volume 2. PFE, Implementation Measure 1.1.2.***

Off-site Circulation Element Roads

PFE, Transportation, Policy 1.1 also states that "new development shall provide needed roadway expansion and improvements off-site to meet demand created

by the development, and to maintain a Level of Service D on Circulation Element Roads." "New development that would significantly impact congestion on roads operating at LOS E or F, either currently or as a result of the project, will be denied unless improvements are scheduled to improve the LOS to D or better or appropriate mitigation is provided." The PFE, however, does not specify what would significantly impact congestion or establish criteria for evaluating when increased traffic volumes would significantly impact congestion. The following significance guidelines provided are the County's preferred method for evaluating whether or not increased traffic volumes generated or redistributed from a proposed project will "significantly impact congestion" on County roads, operating at LOS E or F, either currently or as a result of the project.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment, unless specific facts show that there are other circumstances that mitigate or avoid such impacts:

- ***The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Circulation Element Road or State Highway currently operating at LOS E or LOS F, or will cause a Circulation Element Road or State Highway to operate at a LOS E or LOS F as a result of the proposed project as identified in Table 1, or***

- ***The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity.***

Table 1
Measures of Significant Project Impacts to Congestion on Road Segments
Allowable Increases on Congested Road Segments

Level of service	Two-lane road	Four-lane road	Six-lane road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Notes:
1. By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
2. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

The first significance criterion listed in Table 1 addresses roadways presently operating at LOS E. Based on these criteria, an impact from new development on an LOS E road would be reached when the increase in average daily trips (ADT) on a two-lane road exceeds 200 ADT. Using SANDAG's "Brief Guide for Vehicular Traffic Generation Rates for the San Diego Region" for most discretionary projects this would generate less than 25 peak hour trips. On average, during peak hour conditions, this would be

only one additional car every 2.4 minutes. Therefore, the addition of 200 ADT, in most cases, would result in changes to traffic flow that would not be noticeable to the average driver and therefore would not constitute a significant impact on the roadway. Significance criteria were also established for four-lane and six-lane roads operating at LOS E and are based upon the above 24 hour ADT significance criterion established for two-lane roads. The two-lane road criterion was doubled to determine impacts to four-lane roads and tripled to determine impacts to six-lane roads. This was considered to be conservative since the 24 hour per lane road capacity for a 4-lane road is more than double that of a two-lane road and the per lane capacity of a six-lane road is more than triple that of the two-lane road. For LOS E roads, the additional significance criteria are 400 ADT for a four-lane road and 600 ADT for a six-lane road. Similar to criterion for two-lane roads, the 400 ADT for a 4-lane road and 600 ADT for a 6-lane road criteria would generate less than 25 per lane peak hour trips for most discretionary projects. On average, during peak hour conditions, this would be only one additional car per lane every 2.4 minutes. The addition of 200 ADT per lane (400 ADT for a 4 lane road or 600 ADT for a 6 lane road) , in most cases, would result in changes to traffic flow that would not be noticeable to the average driver and therefore would not constitute a significant impact on the roadway. Road capacities based upon level of service for County roads (two-lane, four-lane and six-lane) are provided in Attachment A.

The second significance criteria listed in Table 1 addresses roadways presently operating at LOS F. Under LOS F congested conditions, small changes and disruptions to the traffic flow on County Circulation Element Roads can have a greater effect on traffic operations when compared to other LOS conditions. In order to better account for potential effects of increased traffic on LOS F roads more stringent significance criteria was established when compared to that for LOS E. Based on this guidance, an impact from new development on an LOS F road would be reached when the increase in average daily trips (ADT) on a two-lane road exceeds 100. Again, using SANDAG's "Brief Guide for Vehicular Traffic Generation Rates for the San Diego Region" for most discretionary projects this would generate less than 12.5 peak hour trips. On average, during peak hour conditions, this would be only one additional car every 4.8 minutes. The addition of 100 ADT, in most cases, would not be noticeable to the average driver and therefore would not constitute a significant impact on the roadway. The same approach used to determine significance criteria for four-lane and six-lane roads operating at LOS E was used to determine appropriate significance criteria for four-lane and six-lane roads operating at LOS F. Based on this approach, the significance criteria for a four-lane road (200 ADT) and for a six-lane road (300 ADT) would generate less than 12.5 per lane peak hour trips for most discretionary projects. On average, during peak hour conditions, this would be only one additional car per lane every 4.8 minutes. The addition of 100 per lane ADT (200 ADT for a 4-lane road and 300 ADT for a 6-lane road) would, in most cases, not be noticeable to the average driver and therefore would not constitute a significant impact on the roadway. In summary, under extremely congested LOS F conditions, small changes and disruptions to the traffic flow can significantly affect traffic operations and additional project traffic can increase the likelihood or frequency of these events. Therefore, the LOS F ADT significance criteria was set at 100 ADT (50% of the LOS E threshold) to provide a higher level of assurance

that the traffic allowed under the threshold would not significantly impact traffic operation on the road segment.

Non-Circulation Element Residential Streets

Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots and not to carry through traffic, however, for projects that will substantially increase traffic volumes on residential streets, a comparison of the traffic volumes on the residential streets with the recommended design capacity must be provided. Recommended design capacities for residential non-Circulation Element streets are provided in the San Diego County Public and Private Road Standards. Traffic volume that exceeds the design capacity on residential streets may impact residences and should be analyzed on a case-by-case basis.

4.2 Intersections

This section provides guidance for evaluating adverse environmental effects a project may have on signalized and unsignalized intersections.

4.2.1 Signalized

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment:

- ***The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F, or will cause a signalized intersection to operate at a LOS E or LOS F as identified in Table 2.***

Table 2
Measures of Significant Project Impacts to Congestion on Intersections
Allowable Increases on Congested Intersections

Level of service	Signalized	Unsignalized
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement

Notes:

1. **A critical movement is one that is experiencing excessive queues.**
2. **By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.**
3. **The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.**

The significance criterion for signalized intersections identified in Table 2 allows an increase in the overall delay at an intersection operating at LOS E of two seconds. This is consistent with the capacity threshold contained in the SANDAG's CMP and guidelines established by the City of San Diego. A delay of two seconds is a small fraction of the typical cycle length for a signalized intersection that ranges between 60 and 120 seconds. The likelihood of increased queues forming due to the additional two seconds of delay is low. Therefore, an increased wait time of two seconds, on average, would result in changes to traffic flow that would not be noticeable to the average driver. Therefore the significance guideline for intersections operating at LOS E is 2 seconds.

The primary significance criterion for signalized intersections operating at LOS F conditions was based upon increased delay at the intersection. Under LOS F congested conditions, small changes and disruptions to the traffic flow to signalized intersections can have a greater effect on overall intersection operations when compared to other LOS conditions. In order to better account for potential effects of increased traffic at signalized intersections operating at LOS F, a more stringent guideline was established when compared to signalized intersection operating at LOS E. A significance guideline of an increased delay of 1 second was established for signalized intersections operating at LOS F. An increase in the overall delay at an intersection of one second, on average, would result in changes to traffic flow that would not be noticeable to the average driver. Therefore the significance guideline for intersections operating at LOS F is 1 second.

Signalized intersections operating at LOS F also have the potential for substantial queuing at specific turning movements that may detrimentally effect overall intersection and/or road segment operations. Thus, an increase of peak hour trips to a critical move was also established as a secondary significance criterion for signalized intersections. A critical movement would be a movement or a lane at an intersection that is experiencing queuing or substantial delay and is affecting the overall operation of the intersection. The increase in peak hour trips to a critical move is a measurement of how many cars can be added to an existing queue. The addition of five trips (peak hour) per critical movement will normally be considered a significant impact. This significance criterion was selected because the five additional trips spread out over the peak hour would not significantly increase the length of an existing queue and would not be noticeable to the average driver (one trip every 12 minutes or 720 seconds). For LOS E intersections, the 5 peak hour trips to a critical movement would not be noticeable to the average driver since the one additional trip during the 12 minute interval on average would clear the traffic signal cycles well within the 12 minute period. It should also be noted that if the 5 additional peak hour trips arrived at the same time these trips would also clear the traffic cycle and existing queue lengths would be re-established.

4.2.2 Unsignalized

The operating parameters and conditions for unsignalized intersections differ dramatically from those of signalized intersections. Very small volume increases on one leg or turn and/or through movement of an unsignalized intersection can substantially affect the calculated delay for the entire intersection. Significance criteria for unsignalized intersections are based upon a minimum number of trips added to a critical movement at an unsignalized intersection.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment:

- ***The additional or redistributed ADT generated by the proposed project will add 20 or more peak hour trips to a critical movement of an unsignalized intersection, and cause an unsignalized intersection to operate below LOS D, or***

- ***The additional or redistributed ADT generated by the proposed project will add 20 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS E, or***

- ***The additional or redistributed ADT generated by the proposed project will add 5 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate at LOS F, or***

- ***The additional or redistributed ADT generated by the proposed project will add 5 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS F, or***

- ***Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, it is found that the generation rate is less than those specified above, and would significantly impact the operations of the intersection.***

The significance guidelines for unsignalized intersections identify a minimum number of trips added to a critical movement at an unsignalized intersection. Since the operations of unsignalized intersections under congested conditions are heavily influenced by traffic volume increases on critical moves, the significance guidelines for unsignalized intersections were based upon the number of trips added to a critical movement. This guideline directly relates to the number of vehicles that can be added to an existing queue that forms at the intersection. A significance criteria of twenty trips (peak hour) per critical movement was used for LOS E conditions. Although delays drivers experience under LOS E condition may be noticeable, they are not yet considered

unacceptable. The twenty trips spread out over the peak hour would not likely cause the intersection delay or existing queue lengths to become unacceptable. The twenty trips (peak hour) would not be noticeable to the average driver. A significance guideline of five trips (peak hour) per critical movement was used for LOS F conditions. The five trips spread out over the peak hour would not significantly increase the length of an existing queue and would not be noticeable to the average driver.

The operations of unsignalized intersections under congested conditions are heavily influenced by traffic volume increases on critical moves. Therefore, the significance guidelines for unsignalized intersections are based upon the number of peak hour trips added to a critical movement at that intersection. This guideline examines the number of vehicles that may be added to an existing queue that forms at the intersection by the additional traffic generated by a project. In LOS E situations, the delays that drivers experience are noticeable, but are not considered excessive. A peak hour increase of twenty trips to the critical movement of an unsignalized intersection would be, on average, one additional car every 3.0 minutes or 180 seconds. Assuming the average wait time for a vehicle in the critical movement queue is less than 3.0 minutes, which is typical for LOS E condition, this would not be noticeable to the average driver and would not be considered a significant impact.

For LOS F conditions, a significance threshold of five trips (peak hour) per critical movement was used. The five trips spread out over the peak hour would not significantly increase the length of an existing queue and would not be noticeable to the average driver. Five trips spread out over an hour would be one car every 12 minutes. This typically exceeds the average wait time in the queue and would not be noticeable to the average driver.

4.3 Ramps

Additional or redistributed ADT generated by the proposed project may significantly increase congestion at a freeway ramp. Caltrans' "Guide for the Preparation of Traffic Impact Studies" states that an operational analysis based upon Caltrans Highway Design Manual should be used in the evaluation of the ramps and in the preparation of the operational analysis that Caltrans' Ramp Metering Guidelines should be used. However, specific criteria for the determination of an impact at a ramp are not provided in the above documents.

The CMP includes guidelines for the determination of traffic impacts at a ramp. These guidelines are summarized in Table 3. Table 3 may be used as a guide in determining significant increases in congestion on ramps and for addressing congestion management plan impacts. Other factors that may be considered include ramp metering, location (rural vs. urban), ramp design, and the proximity of adjacent intersections. Coordination with Caltrans and the local jurisdiction should be conducted to determine appropriate impact criteria for the specific ramps being assessed.

4.4 Congestion Management Plan

Projects that generate over 2,400 ADT or 200 peak hour trips, must comply with the traffic study requirements of SANDAG's Congestion Management Plan. Trip distributions for these projects must also use the current regional computer traffic model. Projects that must prepare a CMP analysis should also follow the CMP traffic impact analysis guidelines. A summary of these guidelines is provided in Table 3.

Table 3
Measure of Significant Project Traffic Impacts for Circulation Element Roads, Signalized Intersections, and Ramps

Level of Service With Project	Allowable Change Due to Project Impact						
	Freeways		Roadway Segments*		Intersections**	Ramps***	Ramps with >15 min. delay
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)	Delay (min.)
E & F	0.01	1	0.02	1	2	-	2

* For County arterials, which are not identified in SANDAG's Regional Transportation Plan and Congestion Management Plan as regionally significant arterials, significance may be measured based upon an increase in average daily trips. The allowable change in ADT due to project impacts in this instance would be identified in Table 1.

** Signalized intersections.

*** See the Transportation and Traffic Report Format and Content Requirements for guidance on ramp metering analysis.

KEY

V/C	=	Volume to Capacity ratio
Speed	=	Speed measured in miles per hour
Delay	=	Average stopped delay per vehicle measured in seconds, or minutes
LOS	=	Level of Service
ADT	=	Average Daily Trips

4.5 Hazards Due to an Existing Transportation Design Feature

Many roadways and intersections in the County were designed and constructed prior to the adoption of current road design standards. The design of the roadways and intersections, while adequate for existing traffic volumes, may pose an increased risk if traffic volumes substantially increase along the road segment or at the intersection as a result of the proposed project. Increased traffic generated or redistributed by a proposed project may cause a significant traffic operational impact to an existing transportation design feature. Therefore, it is necessary to evaluate potential hazards to an existing transportation design feature.

The determination of significant hazards to an existing transportation design feature shall be on a case-by-case basis, considering the following factors:

- Design features/physical configurations of access roads may adversely affect the safe transport of vehicles along the roadway.

- The percentage or magnitude of increased traffic on the road due to the proposed project may affect the safety of the roadway.

- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, may result in vehicle conflicts with other vehicles or stationary objects.

- The project does not conform to the requirements of the private or public road standards, as applicable.

4.6 Hazards to Pedestrians or Bicyclists

Many roadways and intersections in the County do not have pedestrian or bicycle facilities. The roadways and intersections, while adequate for current conditions, may pose an increased risk if traffic volumes, pedestrian volumes, or bicycle volumes substantially increase along the road segment or at the intersection, as a result of the proposed project. Increased traffic generated or redistributed by a proposed project may cause a significant traffic operational impact to pedestrians or bicyclists. Therefore, it is necessary to evaluate potential hazards to pedestrians or bicyclists.

The determination of significant hazards to pedestrians or bicyclists shall be on a case-by-case basis, considering the following factors:

- Design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.

- The amount of pedestrian activity at the project access points may adversely affect pedestrian safety.

- The project may result in the preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.

- The percentage or magnitude of increased traffic on the road due to the proposed project may adversely affect pedestrian and bicycle safety.

- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers may result in vehicle/pedestrian, vehicle/bicycle conflicts.

- The project does not conform to the requirements of the private or public road standards, as applicable.

- The project may result in a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

4.7 Parking Capacity

The following significance guideline will be considered a potentially significant parking capacity impact.

- ***The project cannot demonstrate compliance with the standards set forth by the County of San Diego Zoning Ordinance (Sections 6750-6799) and the County of San Diego Off-Street Parking Design Manual.***

Urban planners set minimum parking requirements for every land use type. These requirements are designed to ensure that land developers will provide enough spaces to satisfy the peak demand for parking to the subject use. The requirements are typically listed in a jurisdiction's zoning ordinance and this is the case in the County of San Diego, with a supplemental Off-Street Parking Design Manual. The establishment of minimum standards in the Zoning Ordinance is primarily based on surveys of nearby cities and consultation with professional traffic engineering association publications, such as the Institute of Transportation Engineers (ITE) handbooks. Identifying an adequate number of peak hour parking spaces for each use is not an exact science and there is no uniform formula or origin of minimum parking requirements (Shoup, 1999). Instead minimum parking standards have been developed through a trial and error process to identify the appropriate minimum standards for the subject jurisdictions. The County of San Diego practiced this same technique when parking minimum parking standards were last updated in 1985. Based on the continued fine-tuning of minimum parking standards, non-compliance with the County of San Diego Zoning Ordinance and Off-Street Parking Design Manual will result in a potentially significant impact.

4.8 Alternative Transportation

Alternative transportation is addressed in the County's General Plan Public Facilities Element (PFE). The County's stated objective for alternative transportation is addressed by the PFE, Objective 4. Objective 4 asks for a "Reduction in the demand on the road system through increased public use of alternate forms of transportation and other means." Pursuant to Objective 4, Policies 4.1 – 4.4 establish a means for the County to meet the objective. As such, if a proposed project is not in conformance with the applicable alternative transportation policies in the PFE, a significant conflict with the County's alternative transportation policies may occur.

County's *Draft Guidelines for Determining Significance* (Aug. 2007)

DRAFT

COUNTY OF SAN DIEGO

GUIDELINES FOR DETERMINING SIGNIFICANCE AND REPORT FORMAT AND CONTENT REQUIREMENTS

TRANSPORTATION AND TRAFFIC

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

Circulated for Public Review
August 9, 2007 - September 7, 2007

4.0 GUIDELINES FOR DETERMINING IMPACT SIGNIFICANCE

The following significance guidelines should guide the evaluation of whether a significant impact to transportation and traffic will occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on transportation and traffic, absent specific evidence of such an effect.

This section provides guidance for evaluating adverse environmental effects a project may have on traffic. The guidelines for determining significance are organized into eight categories: road segments, intersections, ramps, congestion management plan, hazards due to an existing transportation design feature, hazards to pedestrians or bicyclists, parking capacity, and alternative transportation. A discussion of how to evaluate project and cumulative level impacts is also included in the Transportation and Traffic Report Format and Content Requirement.

4.1 Road Segments

Pursuant to the County's General Plan Public Facilities Element (PFE), new development must provide improvements or other measures to mitigate traffic impacts to avoid:

(a) Reduction in Level of Service (LOS) below "C" for on-site Circulation Element roads;

(b) Reduction in LOS below "D" for off-site and on-site abutting Circulation Element roads; and

(c) "Significantly impacting congestion" on roads that operate at LOS "E" or "F". If impacts cannot be mitigated, the project will be denied unless a statement of overriding findings is made pursuant to the State CEQA Guidelines. The PFE, however, does not include specific guidelines~~/thresholds~~ for determining the amount of additional traffic that would "significantly impact congestion" on such roads~~, as that phrase is used in item (c) above~~.

The County has created the following guidelines to evaluate likely traffic impacts of a proposed project for road segments and intersections serving that project site, for purposes of determining whether the development would "significantly impact congestion" on the referenced LOS E and F roads. The guidelines are summarized in Table 1. The levels~~thresholds~~ in Table 1 are based upon average operating conditions on County roadways. It should be noted that these levels~~thresholds~~ only establish general guidelines, and that the specific project location must be taken into account in conducting an analysis of traffic impact from new development.

4.3 Two-Lane Highways

This section provides level of service impact guidelines for State highways and County arterials operating as two-lane highways.

Several designated County Circulation Element Roads are State highways under the jurisdiction of Caltrans. These highways include State Route 67, State Route 76, State Route 78, State Route 79 and State Route 94 and within the unincorporated area of the County most of these routes operate as two-lane highways. Caltrans has prepared a "Guide for the Preparation of Traffic Impact Studies" that should also be referenced when evaluating traffic impacts to the above Circulation Element Roads that are under the jurisdiction of Caltrans. Also, Caltrans District 11 local office should be consulted early to adequately scope the traffic study and ensure potential local district issues in the traffic impact study are addressed. While the "Guide for the Preparation of Traffic Impact Studies" provides guidance for scoping a traffic study to assess impacts on Caltrans facilities, it does not provide specific guidelines for determining when a significant traffic impact occurs; hence, the development of the following significance guidelines for two-lane highways.

In addition to the State Routes identified above, several County Circulation Element Roads, although designated as arterials, operate as two-lane highways. These include roadways that have passing opportunities for 40% or more along the length of the roadway and/or have few/limited access points and intersections along the length of the roadway. Examples would include sections of Old Highway 80, Old Highway 395 and Del Dios Highway. The Highway Capacity Manual (HCM) includes analysis criteria for assessment of LOS for two-lane highways. Section 2.2 of the County of San Diego's "Transportation and Traffic Report Format and Content Requirements" states that "The Director of Public Works may, based upon a review of the operational characteristics of the roadway, designate that a HCM analysis be used to determine the LOS for a two-lane County arterial in lieu of the LOS table provided in the County of San Diego Public Road Standards." Level of service tables for two-lane highways have also been established by the County of Riverside and the County of Sacramento.

4.3.1 Signalized Intersection Spacing Over One Mile

This section provides LOS impact significance levels for State highways and County arterials operating as two-lane highways with signalized intersection spacing over one mile.

Table 3
Measures of Significant Project Impacts to Congestion
Allowable Increases on Two-lane Highways
with Signalized Intersection Spacing Over One Mile

Level of Service	LOS Criteria	Impact Significance Level
LOS E	> 16,200 ADT	>325 ADT
LOS F	> 22,900 ADT	>225 ADT

Note:
Where detailed data is available, the Director of Public Works may also accept a detailed level of service analysis based upon the two-lane highway analysis procedures provided in the Chapter 20 Highway Capacity Manual.

Two-lane highways with intersection spacing over 1 mile have minimal side friction and conform to the HCM assumptions for two-lane highways. Level of service criteria for LOS D/E and LOS E/F are provided in Table 3 based upon criteria established with the County of Riverside and the County of Sacramento. These criteria are appropriate for use for most projects and two-lane highways, as road conditions for two-lane highways in these Counties are similar to those in the County of San Diego. However, County staff and/or Caltrans may determine a more detailed HCM analysis should be performed to evaluate and determine the overall level of service in certain cases.

Impact significance levels are also provided in Table 3 for two-lane highways with signalized intersection spacing over 1 mile. The first impact significance level addresses impacts from new development (both direct and cumulative impacts) on an LOS E road. In this scenario a significant impact would be reached when the increase in average daily trips (ADT) on a two-lane road exceeds 325. For most discretionary projects, the 325 ADT level would generate less than 35 peak hour trips. On average, during peak hour conditions, this would be only one additional car every 1.7 minutes. The addition of 325 ADT would, in most cases, not be noticeable to the average driver on a two-lane highway which has higher speeds and reduced side friction compared to a typical arterial. The additional 325 ADT, therefore, would not constitute a significant impact on a two-lane highway operating at LOS E; however, the addition of more than 325 ADT would generally result in a significant impact.

The second impact significance guideline concerns roadways presently operating at LOS F. Under LOS F congested conditions, small changes and disruptions to the traffic flow on County Circulation Element Roads can have a greater affect on traffic operations when compared to other LOS conditions. In order to better account for potential effects of increased traffic on LOS F roads, a more stringent guideline was

established when compared to that for LOS E. The guideline for determining significance from new development (both direct and cumulative impacts) on a LOS F road would be reached when the increase in average daily trips (ADT) on a two-lane road exceeds 225. For most discretionary projects, the 225 ADT level would generate less than 25 peak hour trips. On average, during peak hour conditions, this would be only one additional car every 2.4 minutes. The addition of 225 ADT would, in most cases, not be noticeable to the average driver on a two-lane highway which has higher speeds and reduced side friction compared to a typical arterial. The additional 225 ADT, therefore, would not constitute a significant impact on a two-lane highway operating at LOS F. The addition of more than 225 ADT would be a significant impact; ; however, the addition of more than 225 ADT would generally result in a significant impact.

4.3.2 Signalized Intersection Spacing Under One Mile

This section provides level of service impact guidelines for State highways and County arterials operating as two-lane highways with signalized intersection spacing under one mile. Level of Service for purposes of this significance guideline is based upon the overall intersection operations – similar to Urban Street analysis in Chapter 15 Highway Capacity Manual. For determining impact significance at the signalized intersection, Table 4 "Measures of Significant Project Impacts to Congestion on Intersections Allowable Increases on Congested Intersections" may be used as summarized below:

Table 4
Measures of Significant Project Impacts to Congestion
Allowable Increases on Two-lane Highways
with Signalized Intersection Spacing Under One Mile

Intersections

Level of Service	Signalized
LOS E	Delay of 2 seconds
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement

Note:
A critical movement is one that is experiencing excessive queues.

Note:
By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.

Note:
The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

The second impact significance guideline (Table 4) concerns two-lane highways with signalized intersection spacing less than 1 mile. Two-lane highways with intersection

spacing less than 1 mile operate similar to urban streets as identified in the HCM. Per the HCM, level Urban Streets have lower speeds with levels of service most characterized by the operation of the intersections along the highway/street. For two-lane highways with intersection spacing less than 1 mile, the level of service will be determined to be that of the intersections along the highway. Impacts for the highway will be determined by evaluating the intersection impact criteria identified in Table 4 of the County of San Diego's "Transportation and Traffic Guidelines for Determining Significance."

Impacts related to operational features on two-lane highways will be evaluated on a case-by-case basis based upon traffic flow patterns, geometrics, available sight distance, accident histories, and other factors. Coordination with County and/or County staff is recommended regarding any additional operational analysis that may be necessary.

4.43 Ramps

Additional or redistributed ADT generated by the proposed project may significantly increase congestion at a freeway ramp. Caltrans' "Guide for the Preparation of Traffic Impact Studies" states that an operational analysis based upon Caltrans' Highway Design Manual should be used in the evaluation of ~~the~~ ramps and ~~in the preparation of the operational analysis~~ that Caltrans' Ramp Metering Guidelines should be used in the preparation of the operational analysis. However, specific criteria for the determination of an impact at a ramp are not provided in the above documents.

The CMP includes guidelines for the determination of traffic impacts at a ramp. These guidelines are summarized in Table ~~3~~5. Table ~~3~~5 may be used as a guide in determining significant increases in congestion on ramps and for addressing congestion management plan impacts. Other factors that may be considered include ramp metering, location (rural vs. urban), ramp design, and the proximity of adjacent intersections. Coordination with Caltrans and the local jurisdiction should be conducted to determine appropriate impact criteria for the specific ramps being assessed.

4.54 Congestion Management Plan

Projects that generate over 2,400 ADT or 200 peak hour trips, must comply with the traffic study requirements of SANDAG's Congestion Management Plan. Trip distributions for these projects must also use the current regional computer traffic model. Projects that must prepare a CMP analysis should also follow the CMP traffic impact analysis guidelines. A summary of these guidelines is provided in Table ~~3~~5.

Caltrans *Guide for the Preparation of Traffic Impact Studies*

GUIDE FOR THE PREPARATION

OF

TRAFFIC IMPACT STUDIES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

December 2002

PREFACE

The California Department of Transportation (Caltrans) has developed this "Guide for the Preparation of Traffic Impact Studies" in response to a survey of cities and counties in California. The purpose of that survey was to improve the Caltrans local development review process (also known as the Intergovernmental Review/California Environmental Quality Act or IGR/CEQA process). The survey indicated that approximately 30 percent of the respondents were not aware of what Caltrans required in a traffic impact study (TIS).

In the early 1990s, the Caltrans District 6 office located in Fresno identified a need to provide better quality and consistency in the analysis of traffic impacts generated by local development and land use change proposals that effect State highway facilities. At that time, District 6 brought together both public and private sector expertise to develop a traffic impact study guide. The District 6 guide has proven to be successful at promoting consistency and uniformity in the identification and analysis of traffic impacts generated by local development and land use changes.

The guide developed in Fresno was adapted for statewide use by a team of Headquarters and district staff. The guide will provide consistent guidance for Caltrans staff who review local development and land use change proposals as well as inform local agencies of the information needed for Caltrans to analyze the traffic impacts to State highway facilities. The guide will also benefit local agencies and the development community by providing more expeditious review of local development proposals.

Even though sound planning and engineering practices were used to adapt the Fresno TIS guide, it is anticipated that changes will occur over time as new technologies and more efficient practices become available. To facilitate these changes, Caltrans encourages all those who use this guide to contact their nearest district office (i.e., IGR/CEQA Coordinator) to coordinate any changes with the development team.

ACKNOWLEDGEMENTS

The District 6 traffic impact study guide provided the impetus and a starting point for developing the statewide guide. Special thanks is given to Marc Birnbaum for recognizing the need for a TIS guide and for his valued experience and vast knowledge of land use planning to significantly enhance the effort to adapt the District 6 guide for statewide use. Randy Treece from District 6 provided many hours of coordination, research and development of the original guide and should be commended for his diligent efforts. Sharri Bender Ehlert of District 6 provided much of the technical expertise in the adaptation of the District 6 guide and her efforts are greatly appreciated.

A special thanks is also given to all those Cities, Counties, Regional Agencies, Congestion Management Agencies, Consultants, and Caltrans Employees who reviewed the guide and provided input during the development of this Guide for the Preparation of Traffic Impact Studies.

TABLE OF CONTENTS

I. INTRODUCTION

Caltrans desires to provide a safe and efficient State transportation system for the citizens of California pursuant to various Sections of the California Streets and Highway Code. This is done in partnership with local and regional agencies through procedures established by the California Environmental Quality Act (CEQA) and other land use planning processes. The intent of this guide is to provide a starting point and a consistent basis in which Caltrans evaluates traffic impacts to State highway facilities. The applicability of this guide for local streets and roads (non-State highways) is at the discretion of the effected jurisdiction.

Caltrans reviews federal, State, and local agency development projects[1], and land use change proposals for their potential impact to State highway facilities. The primary objectives of this guide is to provide:

- guidance in determining if and when a traffic impact study (TIS) is needed,
- consistency and uniformity in the identification of traffic impacts generated by local land use proposals,
- consistency and equity in the identification of measures to mitigate the traffic impacts generated by land use proposals,
- lead agency[2] officials with the information necessary to make informed decisions regarding the existing and proposed transportation infrastructure (see Appendix A, Minimum Contents of a TIS)
- TIS requirements early in the planning phase of a project (i.e., initial study, notice of preparation, or earlier) to eliminate potential delays later,
- a quality TIS by agreeing to the assumptions, data requirements, study scenarios, and analysis methodologies prior to beginning the TIS, and
- early coordination during the planning phases of a project to reduce the time and cost of preparing a TIS.

II. WHEN A TRAFFIC IMPACT STUDY IS NEEDED

The level of service[3] (LOS) for operating State highway facilities is based upon measures of effectiveness (MOEs). These MOEs (see Appendix "C-2") describe the measures best suited for analyzing State highway facilities (i.e., freeway segments, signalized intersections, on- or off-ramps, etc.). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" (see Appendix "C-3") on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained.

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[1] "Project" refers to activities directly undertaken by government, financed by government, or requiring a permit or other approval from government as defined in Section 21065 of the Public Resources Code and Section 15378 of the California Code of Regulations.

[2] "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Defined in Section 21165 of the Public Resources Code, the "California Environmental Quality Act, and Section 15367 of the California Code of Regulations.

[3] "Level of service" as defined in the latest edition of the Highway Capacity Manual, Transportation Research Board, National Research Council.

A. Trip Generation Thresholds

The following criterion is a starting point in determining when a TIS is needed. When a project:

1. Generates over 100 peak hour trips assigned to a State highway facility
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis[4]:
   a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
   b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
   c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).

Note: A traffic study may be as simple as providing a traffic count to as complex as a microscopic simulation. The appropriate level of study is determined by the particulars of a project, the prevailing highway conditions, and the forecasted traffic.

B. Exceptions

Exceptions require consultation between the lead agency, Caltrans, and those preparing the TIS. When a project's traffic impact to a State highway facility can clearly be anticipated without a study and all the parties involved (lead agency, developer, and the Caltrans district office) are able to negotiate appropriate mitigation, a TIS may not be necessary.

C. Updating An Existing Traffic Impact Study

A TIS requires updating when the amount or character of traffic is significantly different from an earlier study. Generally a TIS requires updating every two years. A TIS may require updating sooner in rapidly developing areas and not as often in slower developing areas. In these cases, consultation with Caltrans is strongly recommended.

III. SCOPE OF TRAFFIC IMPACT STUDY

Consultation between the lead agency, Caltrans, and those preparing the TIS is recommended before commencing work on the study to establish the appropriate scope. At a minimum, the TIS should include the following:

A. Boundaries of the Traffic Impact Study

All State highway facilities impacted in accordance with the criteria in Section II should be studied. Traffic impacts to local streets and roads can impact intersections with State highway facilities. In these cases, the TIS should include an analysis of adjacent local facilities, upstream and downstream, of the intersection (i.e., driveways, intersections, and interchanges) with the State highway.

[4] A "lesser analysis" may include obtaining traffic counts, preparing signal warrants, or a focused TIS, etc.

B. Traffic Analysis Scenarios

Caltrans is interested in the effects of general plan updates and amendments as well as the effects of specific project entitlements (i.e., site plans, conditional use permits, sub-divisions, rezoning, etc.) that have the potential to impact a State highway facility. The complexity or magnitude of the impacts of a project will normally dictate the scenarios necessary to analyze the project. Consultation between the lead agency, Caltrans, and those preparing the TIS is recommended to determine the appropriate scenarios for the analysis. The following scenarios should be addressed in the TIS when appropriate:

1. When only a general plan amendment or update is being sought, the following scenarios are required:
   a) Existing Conditions - Current year traffic volumes and peak hour LOS analysis of effected State highway facilities.
   b) Proposed Project Only with Select Zone[5] Analysis - Trip generation and assignment for build-out of general plan.
   c) General Plan Build-out Only - Trip assignment and peak hour LOS analysis. Include current land uses and other pending general plan amendments.
   d) General Plan Build-out Plus Proposed Project - Trip assignment and peak hour LOS analysis. Include proposed project and other pending general plan amendments.

2. When a general plan amendment is not proposed and a proposed project is seeking specific entitlements (i.e., site plans, conditional use permits, sub-division, rezoning, etc.), the following scenarios must be analyzed in the TIS:
   a) Existing Conditions - Current year traffic volumes and peak hour LOS analysis of effected State highway facilities.
   b) Proposed Project Only - Trip generation, distribution, and assignment in the year the project is anticipated to complete construction.
   c) Cumulative Conditions (Existing Conditions Plus Other Approved and Pending Projects Without Proposed Project) - Trip assignment and peak hour LOS analysis in the year the project is anticipated to complete construction.
   d) Cumulative Conditions Plus Proposed Project (Existing Conditions Plus Other Approved and Pending Projects Plus Proposed Project) - Trip assignment and peak hour LOS analysis in the year the project is anticipated to complete construction.
   e) Cumulative Conditions Plus Proposed Phases (Interim Years) - Trip assignment and peak hour LOS analysis in the years the project phases are anticipated to complete construction.
3. In cases where the circulation element of the general plan is not consistent with the land use element or the general plan is outdated and not representative of current or future forecasted conditions, all scenarios from Sections III. B. 1. and 2. should be utilized with the exception of duplicating of item 2.a.

[5] "Select zone" analysis represents a project only traffic model run, where the project's trips are distributed and assigned along a loaded highway network. This procedure isolates the specific impact on the State highway network.

IV. TRAFFIC DATA

Prior to any fieldwork, consultation between the lead agency, Caltrans, and those preparing the TIS is recommended to reach consensus on the data and assumptions necessary for the study. The following elements are a starting point in that consideration.

A. Trip Generation

The latest edition of the Institute of Transportation Engineers' (ITE) TRIP GENERATION report should be used for trip generation forecasts. Local trip generation rates are also acceptable if appropriate validation is provided to support them.

1. Trip Generation Rates – When the land use has a limited number of studies to support the trip generation rates or when the Coefficient of Determination (R^2) is below 0.75, consultation between the lead agency, Caltrans and those preparing the TIS is recommended.
2. Pass-by Trips[6] – Pass-by trips are only considered for retail oriented development. Reductions greater than 15% requires consultation and acceptance by Caltrans. The justification for exceeding a 15% reduction should be discussed in the TIS.
3. Captured Trips[7] – Captured trip reductions greater than 5% requires consultation and acceptance by Caltrans. The justification for exceeding a 5% reduction should be discussed in the TIS.
4. Transportation Demand Management (TDM) – Consultation between the lead agency and Caltrans is essential before applying trip reduction for TDM strategies.

NOTE: Reasonable reductions to trip generation rates are considered when adjacent State highway volumes are sufficient (at least 5000 ADT) to support reductions for the land use.

B. Traffic Counts

Prior to field traffic counts, consultation between the lead agency, Caltrans and those preparing the TIS is recommended to determine the level of detail (e.g., location, signal timing, travel speeds, turning movements, etc.) required at each traffic count site. All State highway facilities within the boundaries of the TIS should be considered. Common rules for counting vehicular traffic include but are not limited to:

1. Vehicle counts should be conducted on Tuesdays, Wednesdays, or Thursdays during weeks not containing a holiday and conducted in favorable weather conditions.
2. Vehicle counts should be conducted during the appropriate peak hours (see peak hour discussion below).
3. Seasonal and weekend variations in traffic should also be considered where appropriate (i.e., recreational routes, tourist attractions, harvest season, etc.).

C. Peak Hours

To eliminate unnecessary analysis, consultation between the lead agency, Caltrans and those preparing the TIS is recommended during the early planning stages of a project. In general, the TIS should include a morning (a.m.) and an evening (p.m.) peak hour analyses. Other peak hours (e.g., 11:30 a.m. to 1:30 p.m., weekend, holidays, etc.) may also be required to determine the significance of the traffic impacts generated by a project.

---

[6] "Pass-by" trips are made as intermediate stops between an origin and a primary trip destination (i.e., home to work, home to shopping, etc.).

[7] "Captured Trips" are trips that do not enter or leave the driveways of a project's boundary within a mixed-use development.

D. Travel Forecasting (Transportation Modeling)

The local or regional traffic model should reflect the most current land use and planned improvements (i.e., where programming or funding is secured). When a general plan build-out model is not available, the closest forecast model year to build-out should be used. If a traffic model is not available, historical growth rates and current trends can be used to project future traffic volumes. The TIS should clearly describe any changes made in the model to accommodate the analysis of a proposed project.

V. TRAFFIC IMPACT ANALYSIS METHODOLOGIES

Typically, the traffic analysis methodologies for the facility types indicated below are used by Caltrans and will be accepted without prior consultation. When a State highway has saturated flows, the use of a micro-simulation model is encouraged for the analysis (please note however, the micro-simulation model must be calibrated and validated for reliable results). Other analysis methods may be accepted, however, consultation between the lead agency, Caltrans and those preparing the TIS is recommended to agree on the data necessary for the analysis.

A. Freeway Segments – Highway Capacity Manual (HCM)*, operational analysis
B. Weaving Areas – Caltrans Highway Design Manual (HDM)
C. Ramps and Ramp Junctions – HCM*, operational analysis or Caltrans HDM, Caltrans Ramp Metering Guidelines (most recent edition)
D. Multi-Lane Highways – HCM*, operational analysis
E. Two-lane Highways – HCM*, operational analysis
F. Signalized Intersections[8] – HCM*, Highway Capacity Software**, operational analysis, TRAFFIX™**, Synchro**, see footnote 8
G. Unsignalized Intersections – HCM*, operational analysis, Caltrans Traffic Manual for signal warrants if a signal is being considered
H. Transit – HCM*, operational analysis
I. Pedestrians – HCM*
J. Bicycles – HCM*
K. Caltrans Criteria/Warrants – Caltrans Traffic Manual (stop signs, traffic signals, freeway lighting, conventional highway lighting, school crossings)
L. Channelization – Caltrans guidelines for Reconstruction of Intersections, August 1985, Ichiro Fukutome

*The most current edition of the Highway Capacity Manual, Transportation Research Board, National Research Council, should be used.

****NOTE**: Caltrans does not officially advocate the use of any special software. However, consistency with the HCM is advocated in most but not all cases. The Caltrans local development review units utilize the software mentioned above. If different software or analytical techniques are used for the TIS then consultation between the lead agency, Caltrans and those preparing the TIS is recommended. Results that are significantly different than those produced with the analytical techniques above should be challenged.

[8] The procedures in the Highway Capacity Manual "do not explicitly address operations of closely spaced signalized intersections. Under such conditions, several unique characteristics must be considered, including spill-back potential from the downstream intersection to the upstream intersection, effects of downstream queues on upstream saturation flow rate, and unusual platoon dispersion or compression between intersections. An example of such closely spaced operations is signalized ramp terminals at urban interchanges. Queue interactions between closely spaced intersections may seriously distort the procedures in" the HCM.

VI. MITIGATION MEASURES

The TIS should provide the nexus [Nollan v. California Coastal Commission, 1987, 483 U.S. 825 (108 S.Ct. 314)] between a project and the traffic impacts to State highway facilities. The TIS should also establish the rough proportionality [Dolan v. City of Tigard, 1994, 512 U.S. 374 (114 S. Ct. 2309)] between the mitigation measures and the traffic impacts. One method for establishing the rough proportionality or a project proponent's equitable responsibility for a project's impacts is provided in Appendix "B." Consultation between the lead agency, Caltrans and those preparing the TIS is recommended to reach consensus on the mitigation measures and who will be responsible.

Mitigation measures must be included in the traffic impact analysis. This determines if a project's impacts can be eliminated or reduced to a level of insignificance. Eliminating or reducing impacts to a level of insignificance is the standard pursuant to CEQA and the National Environmental Policy Act (NEPA). The lead agency is responsible for administering the CEQA review process and has the principal authority for approving a local development proposal or land use change. Caltrans, as a responsible agency, is responsible for reviewing the TIS for errors and omissions that pertain to State highway facilities. However, the authority vested in the lead agency under CEQA does not take precedence over other authorities in law.

If the mitigation measures require work in the State highway right-of-way an encroachment permit from Caltrans will be required. This work will also be subject to Caltrans standards and specifications. Consultation between the lead agency, Caltrans and those preparing the TIS early in the planning process is strongly recommended to expedite the review of local development proposals and to reduce conflicts and misunderstandings in both the local agency CEQA review process as well as the Caltrans encroachment permit process.

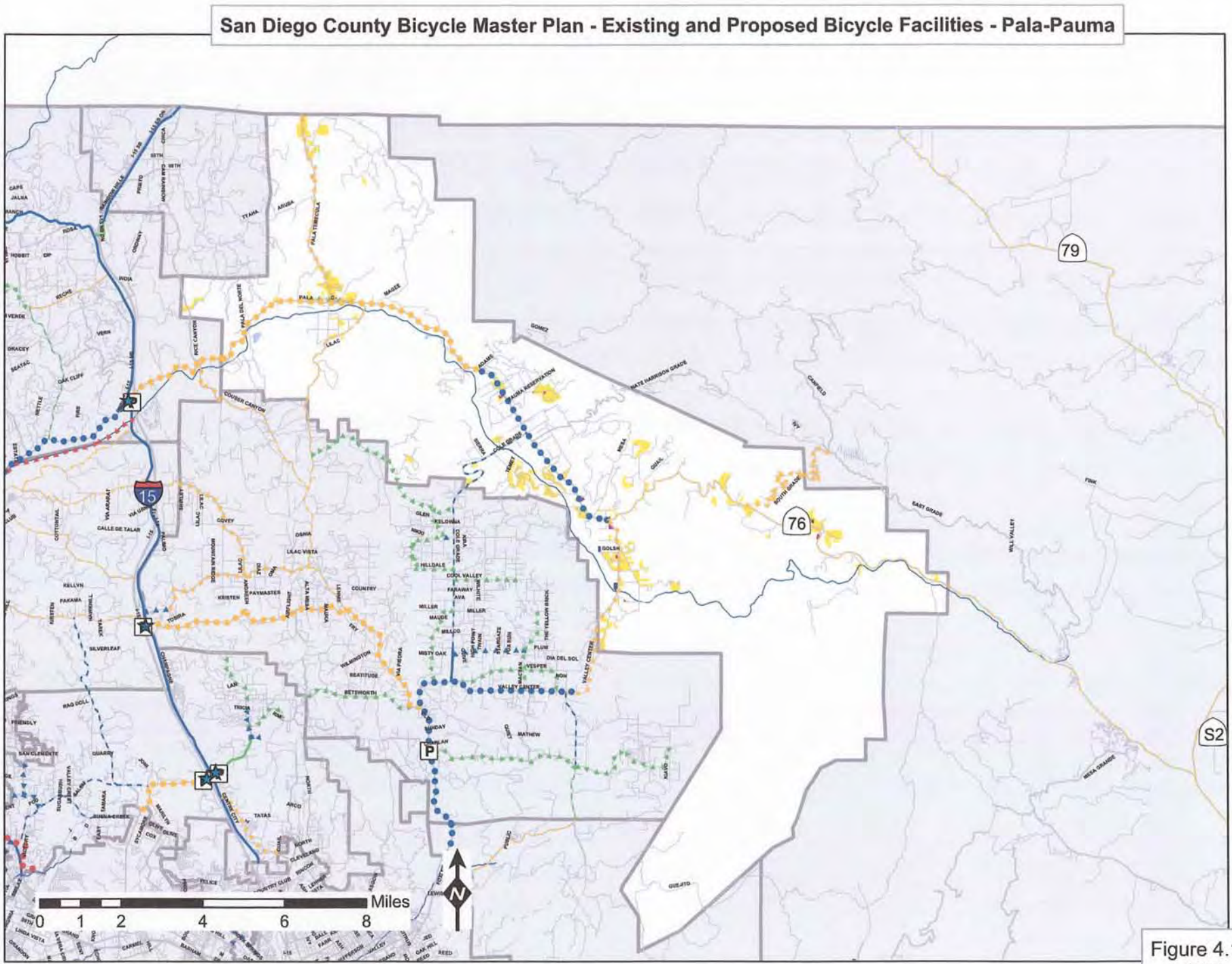


Figure 4.14
p. 4.55

Bill Darnell

From: Ortiz, Francisco "Nick" [Francisco.Ortiz@sdcounty.ca.gov]
Sent: Thursday, November 01, 2007 1:16 PM
To: Cindy Eldred; bdarnell@darnell-assoc.com
Cc: Grunow, Richard; Sinsay, Edwin M; Stevenson, Christine; gszytel@sbcglobal.net; Moriarty, Jerry
Subject: RE: TM5499 Club Estates: SR-76 Bicycle Network System & Bicycle Transportation Plan

Bill & Cindy,

SR-76 is part of the County's Bicycle Network System. The County's Bicycle Transportation Plan identifies SR-76 east of I-15 as Priority 1 Class 2 (bike lane) and Priority 1and 2 Sign (Share the Corridor) Class bikeway facility – see below.

Proposed Bikeways

Several bikeway facilities are proposed in the Community of Pala-Pauma. They include Class II and Class III facilities as well as Share-the-Road signage corridors. Tables 4.44, 4.45 and 4.46 show the segments of bikeway facilities proposed in Pala-Pauma.

Table 4.44: Priority 1 Proposed Bikeways in Pala-Pauma

Class	Street/Path	From	To	Length (mi)
II	Pala Rd	SR-76	Adams Dr	Valley Center Rd	5.00
Sign	Pala Rd	SR-76	Fallbrook Community boundary	Adams Dr	7.90
			Total	**12.90**

Table 4.45: Priority 2 Proposed Bikeways in Pala-Pauma

Class	Street/Path	From	To
II	Cole Grade Rd	SR-76	Valley Center Community boundary
Sign	Lilac Rd	SR-76	Valley Center Community boundary
Sign	SR-76	Valley Center Rd	North Mountain Community boundary

<<Pala Pauma.pdf>>

4.1.1 Bikeways

Bikeways can be classified into three types:

- Class I Bikeway - Typically called a bike path, this provides for bicycle travel on a paved right-of-way completely separated from any street or highway. These are particularly popular with novice cyclists and avoided by experienced cyclists because they can become overly popular and crowded.

- Class II Bikeway - These are often referred to as a bike lane. It provides a striped and stenciled lane for one-way travel on a street or highway. When properly designed, bike lanes help improve the visibility of bicyclists.

- Class III Bikeway - Generally referred to as a bike route, it provides for shared use with pedestrian or

motor vehicle traffic and is identified only by signing. This is recommended when there is enough right-of-way for bicyclists and motorists to safely pass.

Although these facilities are designed for bicycle travel, it is important to recognize that all public roadways, except for those segments of freeways where it is prohibited, are open to travel by bicycle. There are some corridors in the County that may be more suitable for "Share-the-Road" signage rather than official designation as bikeway facilities. These signage corridors are recommended in this Plan as part of the list of proposed bikeway projects.

Thanks,

F.Nick Ortiz

County of San Diego, Department of Public Works

Transportation Division

Transportation Planning/Route Locations section

Phone: 858-874-4204

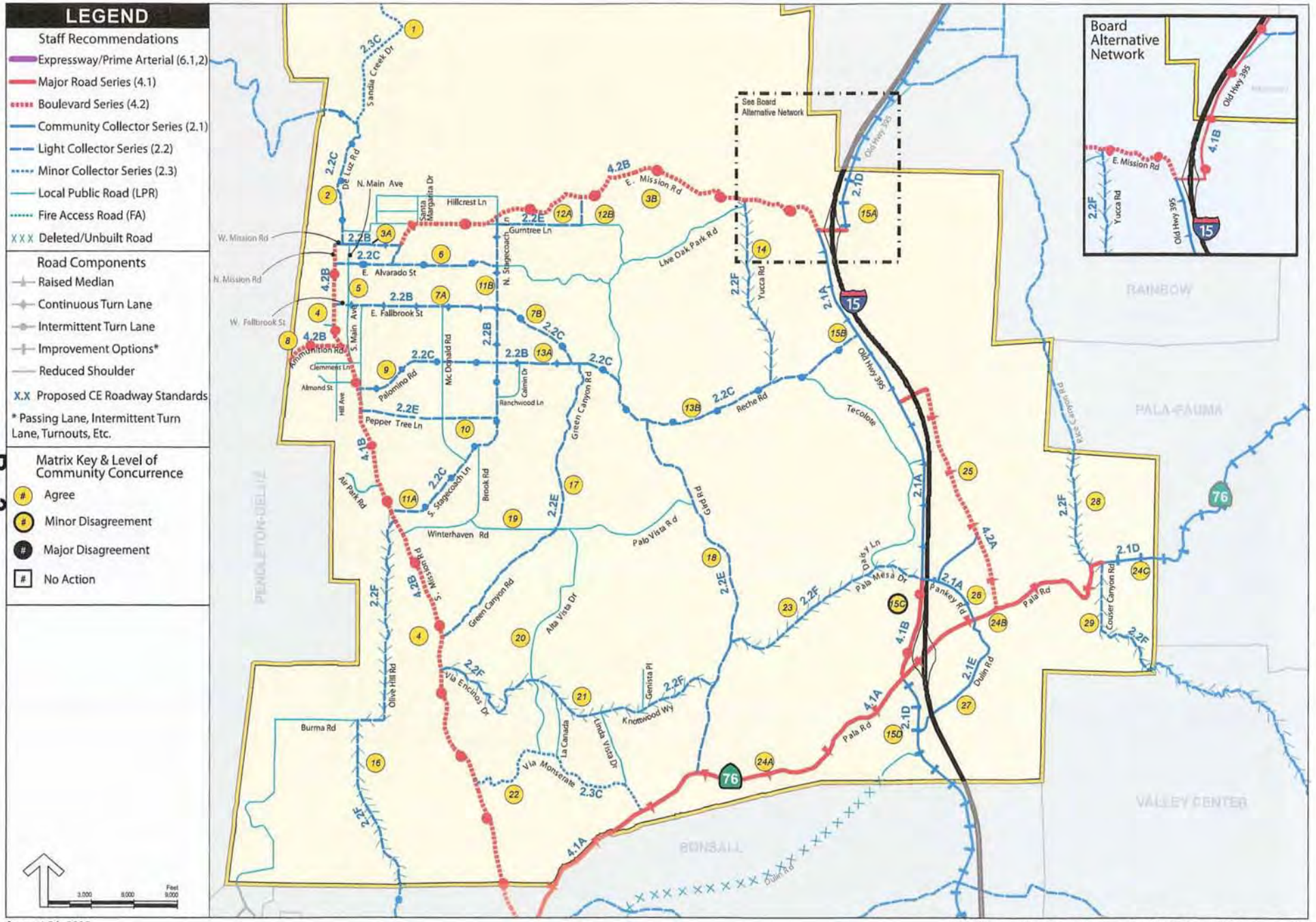
Fax: 858-874-4028

MS 0334

APPENDIX B

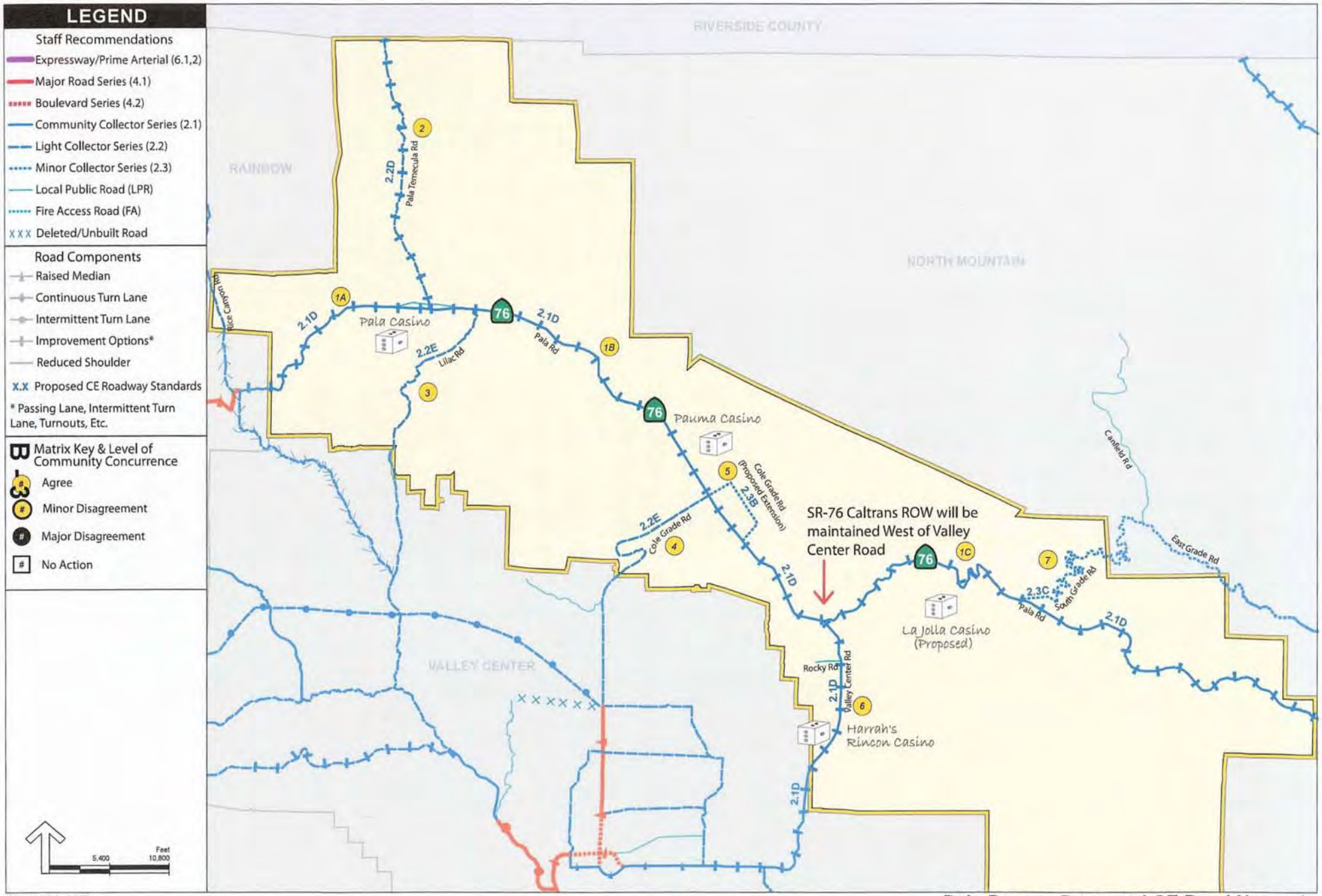
- GP 2020 – Proposed CE Road Network for Pala-Pauma
- County *Proposed GP2020 Circulation Element (CE) Road Standards*
- GP2020 – 2030 Traffic Forecasts for Pala-Pauma

GP 2020 – Proposed CE Road Network for Pala-Pauma



August 24, 2006

Fallbrook: Proposed CE Road Network

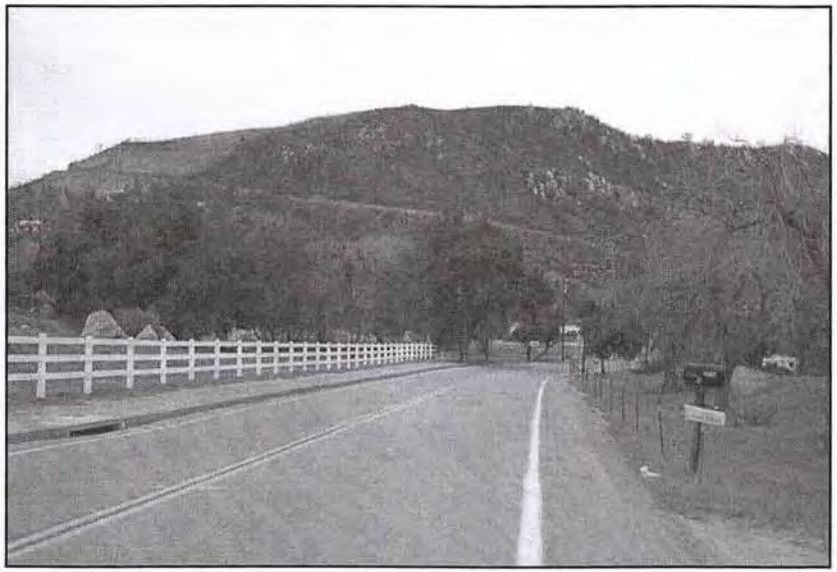


August 24, 2006

Pala-Pauma: Proposed CE Road Network

County *Proposed GP2020 Circulation Element (CE) Road Standards*

Proposed GP2020 Circulation Element (CE)
ROAD STANDARDS



COUNTY OF SAN DIEGO

Excerpts from
FEBRUARY 4, 2006 STEERING COMMITTEE HANDOUT

Updated: April 12, 2006

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PROPOSED GP2020
CIRCULATION ELEMENT (CE) ROAD STANDARDS

This document reflects revisions made to the CE Road Standards as a result of the February 4, 2006 Steering Committee Meeting. The intent is to provide community planning group representatives with the information necessary to develop a preferred road network based on road standards in this document.

Steering Committee Comments

On February 4, 2006 the Steering Committee voted to endorse the proposed GP2020 CE Road Standards, with the provision that a Design Manual will be developed that addresses other road design issues identified by community representatives. The Steering Committee also made minor requests for changes that are reflected in Summary Table 1:

- Separate road types were added for two-lane roads with continuous turn lanes (see 2.1B, 2.2B and 2.3B).
- Existing names were retained for the Expressway, Prime Arterial and Major Road.

However, we did not accommodate the group's request to retain the existing, four-lane Collector Road name (a four-lane road) in order to avoid confusion between that road and the Community Collector, Light Collector and Minor Collector (two-lane roads).

Summary Table 1

The proposed CE Road Standards in Summary Table 1 are organized into a hierarchy of roads ranging from six to two lanes. They include existing, modified, and new CE road classifications. Proposed CE road standards are organized by the number of travel lanes and by design speed, which are important factors when determining road capacity and road design. Variations on road types were developed by adding options such as medians or dedicated turn lanes.

Summary Table 1 also includes some updated threshold capacities, which are based on Level of Service (LOS) D, the Board endorsed standard for GP2020. Traffic volumes that exceed the threshold capacity will generate levels of service E or F on County roads.

Summary Table 1 contains more than one design speed option for two and four-lane roads. As the design speed decreases, the parkway size increases. Wider parkways are well suited to two locations: Villages and highly constrained areas in Rural Lands. Typical parkways range from 10 feet for roads with higher design speeds (Major Road Series, Community Collector Road Series) to 14 feet for roads with the lowest design speeds (Minor Collector Series).

Relationship to Previous Standards

Use the right hand column of the table to determine how the names for existing and new standards are related. In some cases, newly proposed GP2020 standards for Backcountry Communities are reintroduced with a new name.

Only one previous road type, the Rural Mountain Road, is not represented by a proposed road standard. However, the 2.3 Minor Collector road series would be an appropriate substitute for the Rural Mountain Road in rural, mountainous areas with low traffic volumes.

Summary Table 1: Proposed CE Road Standards

CE Road Series	Travel Lanes	Design Speed	No.	Name for Road Classification	Road Components	Threshold Capacity (ADT)	Minimum ROW (feet)[1]	Relationship to Public Road Standards
6.1 Expressway	6 lanes	65 mph	6.1	Expressway	Median[2] / Grade-Separated Interchange	86,000	146'	Same as existing Expressway
6.2 Prime Arterial	6 lanes	65 mph	6.2	Prime Arterial	Median / At-Grade Interchange	50,000	122'	Same as existing Prime Arterial
4.1 Major Road Series	4 lanes	55 mph	4.1A	Major Road with Raised Median	Raised Median	33,400	98'	Same as existing Major Road
			4.1B	Major Road with Intermittent Turn Lanes	Intermittent Turn Lanes	30,800	84' to 98'	Same as existing Collector Road[3]
4.2 Boulevard Series	4 lanes	40 mph	4.2A	Boulevard with Raised Median	Raised Median	27,000	106'	New standard
			4.2B	Boulevard with Intermittent Turn Lane	Intermittent Turn Lanes	25,000	92' to 106'	New standard
2.1 Community Collector Series	2 lanes	45 mph	2.1A	Community Collector with Raised Median	Raised Median	15,000	74'	Similar to existing Town Collector (except higher design speed)
			2.1B	Community Collector with Continuous Turn Lane	Continuous Turn Lane	13,500	74'	
			2.1C	Community Collector with Intermittent Turn Lane	Intermittent Turn Lanes	13,500	60' to 74'	New standard
			2.1D	Community Collector with Passing Lane Option[4]	Passing Lane Option	13,500	84'	Similar to existing Rural Collector
			2.1E	Community Collector	None	10,900	60'	Same as existing Light Collector

1 The minimum ROW for a 4.2 Boulevard, 2.2 Light Collector and 2.3 Minor Collector may be reduced if located in an area that is already developed. A reduced ROW can be achieved by using a 10' minimum parkway. This solution should not be used where adequate ROW is available for the 12' or 14' parkway standard.

2 Medians for Expressways and Prime Arterials are typically raised or depressed, and are defined in the County's Public Road Standards.

3 The current Public Road Standards provide for intermittent turn lanes for a 4-lane Collector Road.

4 See footnote 4 (page 5).

CE Road Series	Travel Lanes	Design Speed	No.	Name for Road Classification	Road Components	Threshold Capacity (ADT)	Minimum ROW (feet)[1]	Relationship to Public Road Standards
2.2 Light Collector Series	2 lanes	40 mph	2.2A	Light Collector with Raised Median	Raised Median	13,500	78'	Similar to existing Town Collector (except wider parkway, ROW)
			2.2B	Light Collector with Continuous Turn Lane	Continuous Turn Lane	13,500	78'	
			2.2C	Light Collector with Intermittent Turn Lanes	Intermittent Turn Lanes	13,500	64' to 78'	New Standard
			2.2D	Light Collector with Passing Lane Option[5]	Passing Lane Option	13,500	88'	Similar to existing Rural Collector
			2.2E	Light Collector	None	10,900	64'	Similar to existing Rural Light Collector
			2.2F	Light Collector with Reduced Shoulder	Reduced Shoulder	8,700	52'	New Standard (Similar to previous Rural Minor Road)
2.3 Minor Collector Series	2 lanes	35 mph	2.3A	Minor Collector with Raised Median	Raised Median	8,000	82'	New Standard
			2.3B	Minor Collector with Intermittent Turn Lane	Intermittent Turn Lane	8,000	68' to 82'	New Standard
			2.3C	Minor Collector	None	7,000	68'	New Standard

5 2.1D and 2.2D road classifications have a wider ROW to accommodate an optional passing lane. However, this road classification could also accommodate other road improvements (intermittent turn lanes, medians, etc.) to improve traffic flow and increase road capacity. Staff recommendations will indicate when other types of road improvements are recommended for the 2.1D and 2.2D road classifications.

Summary Table 2: Location Guide

This table provides guidance on where to locate different CE road classifications during the GP2020 mapping process. ***Within each group, road types are listed in order of preference***. In general, road classifications with lower design speeds are recommended for two locations. The first is Semi-Rural or Rural Lands characterized by steep slopes (or other physical constraints). The second is Villages, where lower design speeds and wider parkways are provided to slow traffic and to provide adequate space for walkways, landscape buffers, and bike paths within a Village.

Lanes:	Village / Village Core[6]	Semi-Rural	Rural Lands
6 Lane	*Limited use only*: 6.1 Expressway or 6.2 Prime Arterial	6.1 Expressway or 6.2 Prime Arterial	6.1 Expressway or 6.2 Prime Arterial
4 Lane	*1st Choice*: 4.2 Boulevard Series *Limited use only*: 4.1 Major Road Series	*1st Choice*: 4.1 Major Road Series *2nd Choice*: 4.2 Boulevard Series	*1st Choice*: 4.1 Major Road Series *Limited use only*: 4.2 Boulevard Series
2 Lane	*1st Choice*: 2.3 Minor Collector Series *2nd Choice*: 2.2 Light Collector Series *Limited use only*: 2.1 Community Collector Series	*1st Choice*: 2.2 Light Collector Series *2nd Choice*: 2.1 Community Collector Series *Limited use only*: 2.3 Minor Collector Series	*Few Constraints*: 2.1 Community Collector Series *Some Constraints*: 2.2 Light Collector Series *High Constraints*: 2.3 Minor Collector Series

This table should be used in conjunction with other mapping criteria prepared for GP2020, which include forecast traffic volumes, adjacent land uses and community preferences. In order to develop a rational network, road mapping should consider the *predominant* topography or land use patterns, and a change in road classification should occur only at road intersections or another easily identifiable location in the network.

6 Please note that passing lanes are not appropriate for a Village.

Preliminary Information: Non-Circulation Element Roads

At the request of several Steering Committee members, preliminary information for two additional roads was added to the CE Road Standards handout:

- **Local Public Road**: Local Public Roads may be shown on the regional CE Map when used to resolve road capacity problems within the CE network or when used to link CE roads together into a complete network. Local Public Roads may be shown on a community plan map when they form an important part of a community-wide or town center road network. Community plan maps can also include new road alignments that are being proposed to improve connectivity within a community. Standards for this road type are located in the County's "Public Road Standards".
- **Fire Access Road**: The Fire Access Road offers a secondary ingress/egress route during fire emergencies. Locations would be identified in community plans. Road standards for fire emergency routes, and policies for gated roads, will be addressed outside the General Plan process.

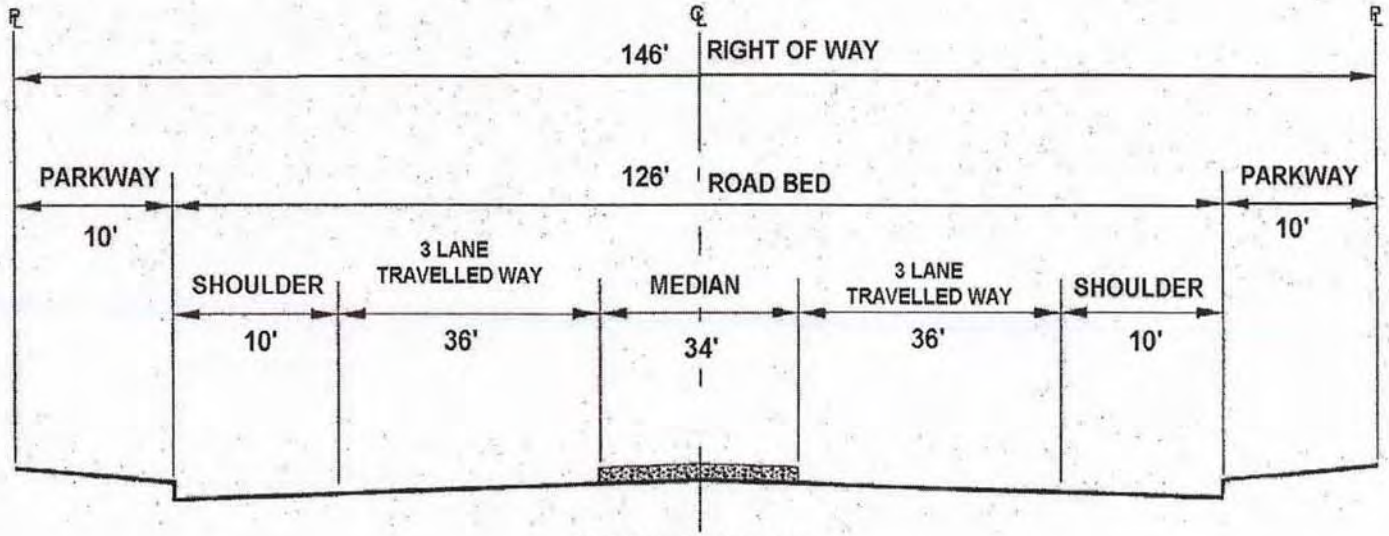
A minimum ROW for Local Public Roads and Fire Access Roads on the CE map will be defined prior to finalizing the Circulation Element Map. At this time, assume a minimum 60 foot minimum ROW for Local Public Roads on the CE map.

Type of Non-CE Road	Travel Lanes	Design Speed	Medians, Passing Lanes, and Dedicated Turn Lane Options	Threshold Capacity (ADT)	Minimum ROW (feet)
Local Public Road	2	Minimum 30 mph	Depends on the type of Local Public Road	4,500	60 '
Fire Access Road	2	TBD	None	Not Applicable	TBD

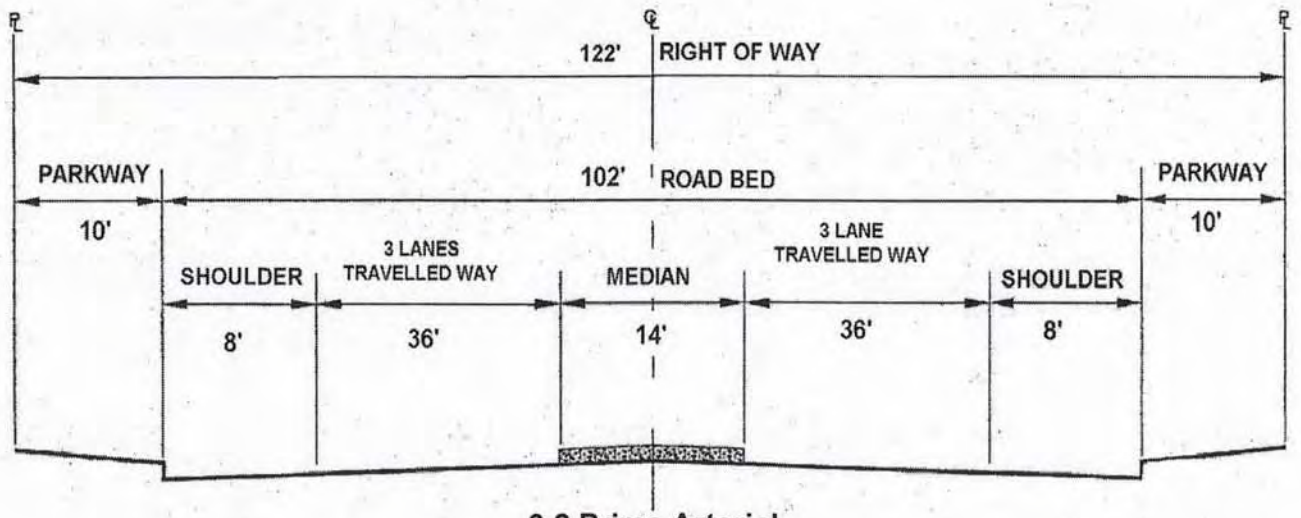
Road Standard Descriptions

The pages that follow contain detailed descriptions for each road standard. Cross sections are included to illustrate the size and organization of all road components. See the Glossary of Terms for an explanation of terms used in the diagrams.

Please note that a wider Right-of-Way (ROW) will be required for bike lanes identified in the Bicycle Master Plan. Areas called Parkways contain landscaping, utilities, and trails or bicycle paths as required. Additional width may be required for trails (called "pathways" in the Trails Master Plan).



6.1 Expressway



6.2 Prime Arterial

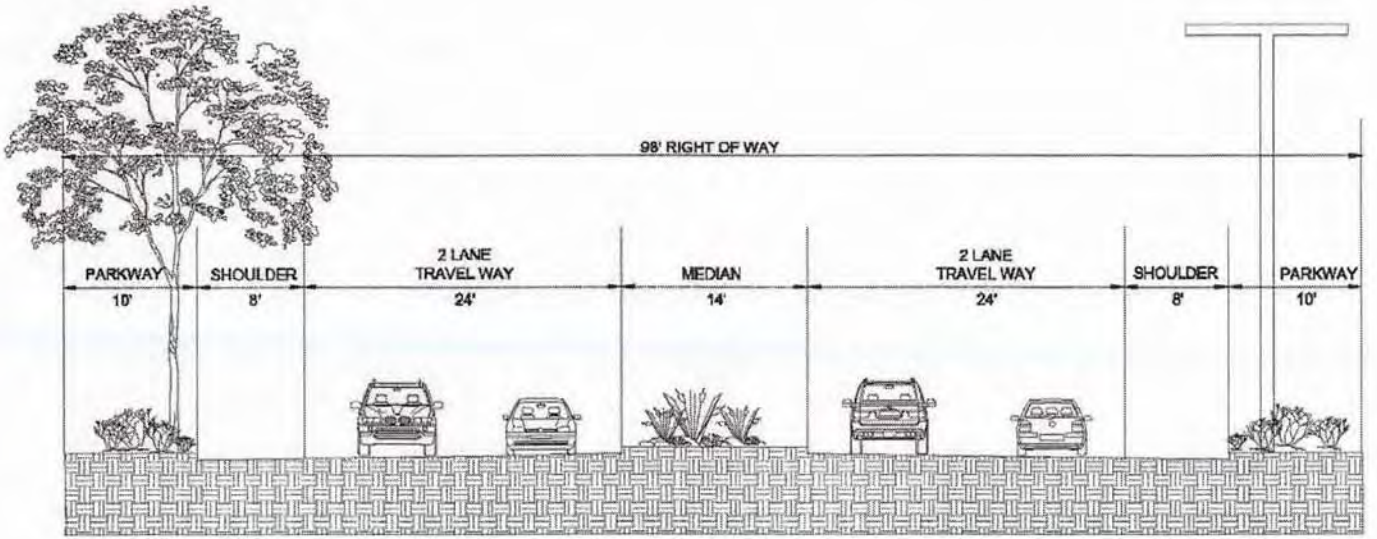
6.1 EXPRESSWAY / 6.2 PRIME ARTERIAL

There are two types of 6-lane road classifications, which are designed to accommodate high speed and high volume traffic. Typically, these roadways should be located outside Villages and in areas with limited physical constraints. The median serves as a separation between travel ways, instead of an area for turning or entering adjacent property.

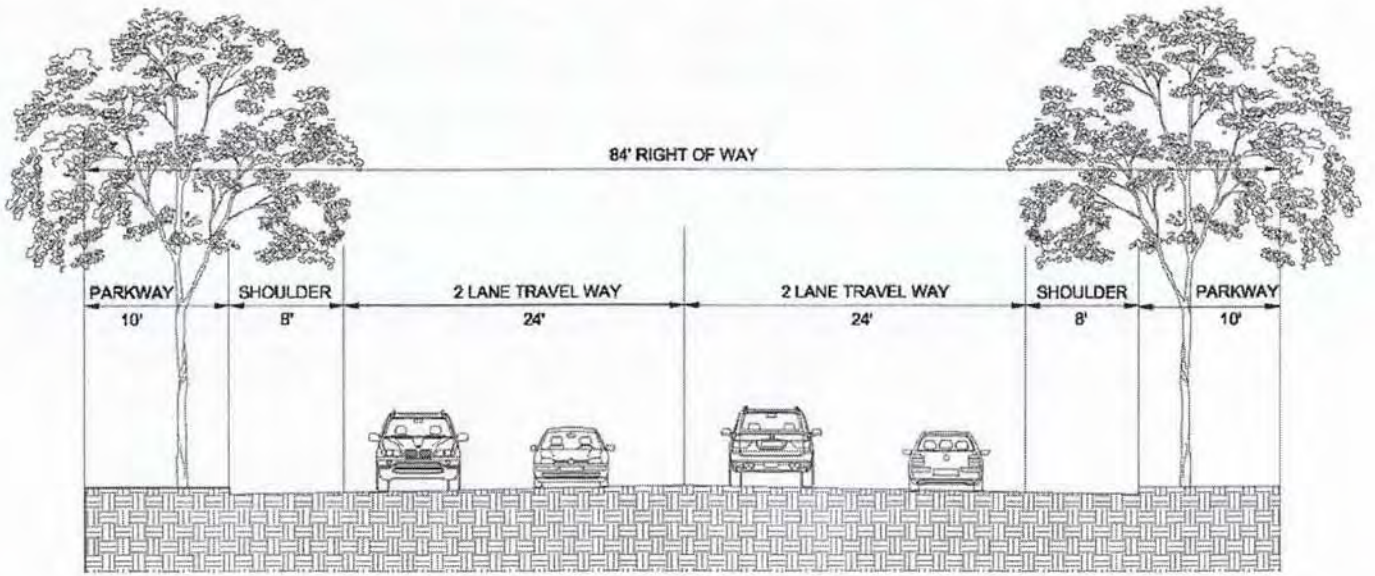
6.1 Expressway is the same as the existing Expressway standard — a divided, multi-lane roadway with a wide median and grade separated interchanges. This road type is similar to a CALTRANS Freeway facility.

6.2 Prime Arterial is the same as the existing Prime Arterial standard — a divided, multi-lane roadway with a median and at-grade interchanges.

	Minimum Standards		Description
	6.1 Expressway	6.2 Prime Arterial	
Design Speed	65 mph	65 mph	
Threshold Capacity	86,000 ADT	50,000 ADT	
ROW	146 '	122 '	
Travel Way	72 '	72 '	6 travel lanes, 12' each
Medians	34 '	14 '	Raised, depressed or flat with optional surface treatments or landscaping
Shoulder	10 '	8 '	Primarily serve as vehicle recovery areas, and parking is restricted.
Parkway	10 '	10 '	10' parkway includes landscaping and utilities as required.
Interchanges	Grade Separated	At-Grade	



4.1 A - Major Road with Raised Median



4.1 B – Major Road with Intermittent Turn Lanes

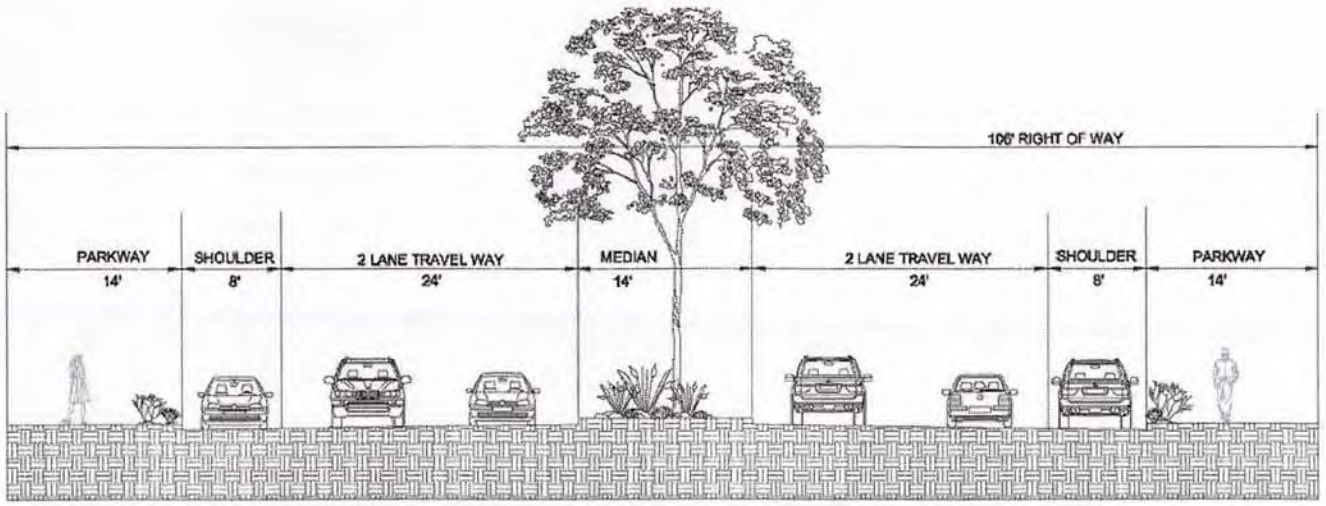
4.1 MAJOR ROAD SERIES

The Major Road is a four-lane roadway that primarily serves medium to high volumes of traffic. Because of its high design speed, this road should typically be located in physically unconstrained areas and its use in Villages should be limited to industrial or heavy commercial areas with low levels of pedestrian and bicycle traffic.

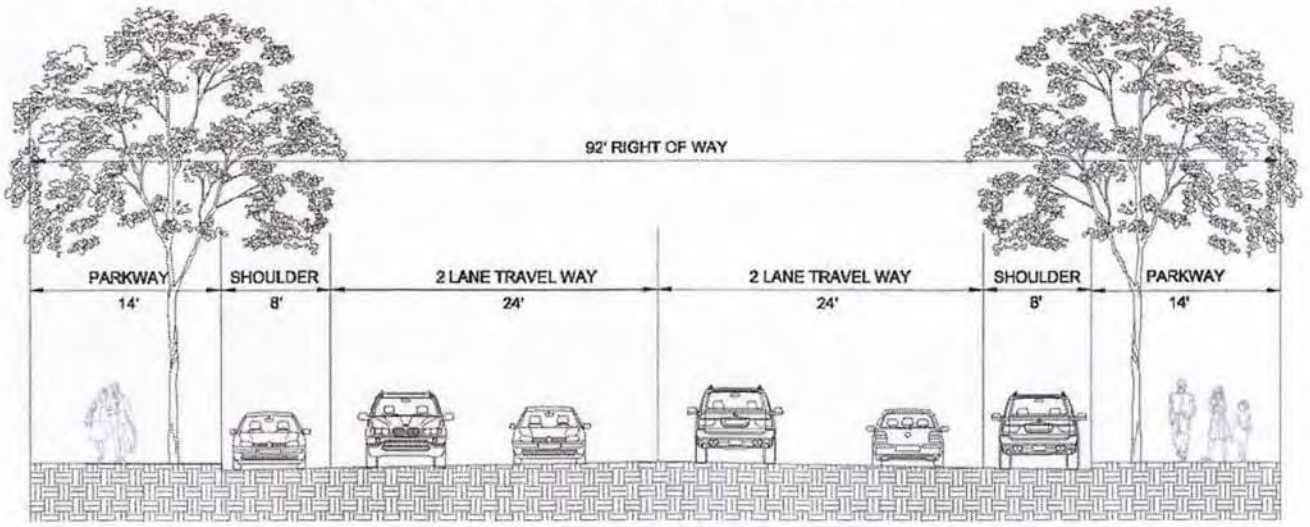
4.1A – Major Road with Raised Median (existing Major Road standard) is appropriate for regional travel between communities where higher traffic volumes are forecast. Potential applications include state highways such as SR67.

4.1B – Major Road with Intermittent Turn Lanes is the same as the existing Collector Road standard (the current Public Road Standards provide for intermittent turn lanes for a 4-lane Collector Road). It will typically be used in areas where turning movements are infrequent or where ROW is limited.

	Minimum Standards		Description
	4.1A – Major Road with Raised Median	4.1B – Major Road with Intermittent Turn Lanes	
Design Speed	55 mph	55 mph	
Threshold Capacity	33,400 ADT	30,800 ADT	
ROW	98 '	84 ' (to 98')	ROW increases to 98' for intermittent turn lanes.
Travel Way	48 '	48 '	4 travel lanes, 12' each
Medians	14 '	None	Median is raised, depressed or flat with optional surface treatments or landscaping
Shoulder	8 '	8 '	Parking restriction should be considered due to high speed travel.
Parkway	10 '	10 '	Typically contains landscaping and utilities. Additional width may be required for trails (pathways).



4.2 A – Boulevard with Raised Median



4.2 B – Boulevard with Intermittent Turn Lane

4.2 BOULEVARD SERIES

The Boulevard Series is a four-lane roadway with a low design speed and a wider parkway that should be used in Villages where higher traffic volumes are combined with on-street parking, pedestrian, bicycle and transit activities. The Boulevard Series can also be used in rural areas that are constrained by slopes or where the community requests a context sensitive solution.

4.2A - Boulevard with Raised Median has a wide parkway that accommodates non-motorized circulation. The median controls access, provides dedicated turn lanes, and increases road capacity. Potential applications include four-lane roadways that traverse villages in Ramona and Valley Center.

4.2B - Boulevard with Intermittent Turn Lane has a wide parkway that accommodates non-motorized circulation. This road would typically be used where turning movements are infrequent or where ROW is limited.

	Minimum Standards		Description
	4.2A – Boulevard with Raised Median	4.2B – Boulevard /w Intermittent Turn Lane	
Design Speed	40 mph	40 mph	
Threshold Capacity	27,000 ADT	25,000 ADT	
ROW	106 '	92 ' to 106 '	ROW will increase where bike lanes are required. ROW for Boulevard 4.2B will increase to 106' at intersections to accommodate a dedicated turn lane.
Travel Way	48 '	48 '	4 travel lanes, 12' each
Medians	14 '	None	14' median is typically raised or depressed with surface treatments or landscaping.
Shoulder	8 '	8 '	Add additional width for bicycle lanes, as required.
Parkway	14'	14 '	Typically contains landscaping, utilities, walkways and/or bicycle paths. Additional width may be required for trails.

TWO LANE ROADS

2.1 Community Collector Series

2.2 Light Collector Series

2.3 Minor Collector Series

Typical cross sections are located on pages 20 and 21

2.1 COMMUNITY COLLECTOR SERIES

The Community Collector Series is a two-lane roadway that primarily serves motorized traffic. Because of the higher design speed, it is appropriate for areas with few physical constraints and areas with little pedestrian, bicycle or other non-motorized traffic. See pages 20 and 21 for cross sections.

2.1A - Community Collector with Raised Median provides more capacity, controls turn movements and improves flow.

2.1B – Community Collector with Continuous Turn Lane improves traffic flow in areas with multiple curb cuts.

2.1C - Community Collector with Intermittent Turn Lane provides more capacity and improves traffic flow.

2.1D - Community Collector with Passing Lane Option has a wider right-of-way for optional or periodic passing lanes to accommodate higher traffic volumes. This road type could be used for State Highways where physical constraints are limited. Please note that passing lanes are not appropriate for Villages. If road improvements (intermittent turn lanes, medians, etc.) other than passing lanes are recommended for 2.1D, that will be indicated in staff recommendations.

2.1E - Community Collector has no special features. It accommodates low to medium traffic volumes in areas where non-motorized traffic and physical constraints are limited.

	Community Collector Series: Minimum Standards					Description
	2.1A Raised Median	2.1B Continuous Turn Lane	2.1C Intermittent Turn Lane	2.1D Passing Lane Option	2.1E (No features)	
Design Speed	45 mph	45 mph	45 mph	45 mph	45 mph	
Threshold Capacity (ADT)	15,000	13,500	13,500	13,500	10,900	
ROW	74'	74'	60' to 74'	84'	60'	Wider ROW required for 2.1C for turn lanes at intersections.
Travel Way	24'	24'	24'	24'	24'	2 travel lanes, 12' each (plus optional passing lane for 2.1D)
Medians	14'	14'	None	None	None	Design Manual will address treatments.
Shoulder	8'	8'	8'	8'	8'	Add additional width for bicycle lanes.
Parkway	10'	10'	10'	22'	10'	2.1D is wider for passing lane option.

2.2 LIGHT COLLECTOR SERIES

Light Collectors are 2-lane roads with a lower design speed and wider parkway than the Community Collector standard. They can be used in rural areas with medium physical constraints or in urbanized areas with moderate levels of non-motorized circulation. See pages 20 and 21 for cross sections.

2.2A - Light Collector with Raised Median has a median that provides more capacity, controls turn movements and improves traffic flow.

2.2B - Light Collector with Continuous Turn Lane improves traffic flow in areas with multiple curb cuts.

2.2C – Light Collector with Intermittent Turn Lanes has intermittent, dedicated turn lanes that provide more capacity and improve traffic flow.

2.2D - Light Collector with Passing Lane Option has a wider right-of-way for optional passing lanes. It can be used for roads within the State Highway system that traverse through physically constrained land, but passing lanes would not be appropriate in Villages. If road improvements other than passing lanes (intermittent turn lanes, medians, etc.) are recommended for 2.1D, that will be indicated in staff recommendations.

2.2E - Light Collector has no special features. It accommodates low to medium traffic volumes where non-motorized traffic and physical constraints are limited.

2.2 F - Light Collector with Reduced Shoulder has a two foot shoulder, a rolled curb with graded pathway, and a narrow right-of-way.

	Light Collector Series: Minimum Standards						Description
	2.2A Raised Median	**2.2B** Continuous Turn Lane	**2.2C** Intermittent Turn Lanes	**2.2D** Passing lane option	**2.2E** (No Features)	**2.2F** Reduced shoulder	
Design Speed	40 mph	40 mph	40 mph	40 mph	40 mph	40 mph	
Threshold Capacity (ADT)	13,500	13,500	13,500	13,500	10,900	8,700	
ROW	78'	78'	64' to 78'	88'	64'	52'	Wide ROW for 2.2D accommodates turn lanes at intersections
Travel Way	24'	24'	24'	24'	24'	24'	2 travel lanes, 12' each (plus optional passing lane for 2.2A)
Medians	14'	14'	None	None	None	None	Design Manual will address treatments.
Shoulder	8'	8'	8'	8'	8'	2'	Add 5' for bicycle lanes, if required
Parkway	12'	12'	12'	24'	12'	12'	

2.3 MINOR COLLECTOR SERIES

The Minor Collector is a two-lane roadway with a very low design speed that is appropriate for rural areas that are highly constrained and for areas within a Village with heavy pedestrian, bicycle and transit activities. This standard could also be used in Semi-Rural areas with high levels of "side friction", or access from adjacent parcels.

Minor Collectors have a wide parkway that, in rural areas, can be used to grade slopes and improve visibility or to improve tight curves. In more urbanized areas, the wide parkway can be used for pedestrian and bicycle paths and for landscape buffers between vehicular and non-vehicular circulation. See pages 20 and 21 for cross sections.

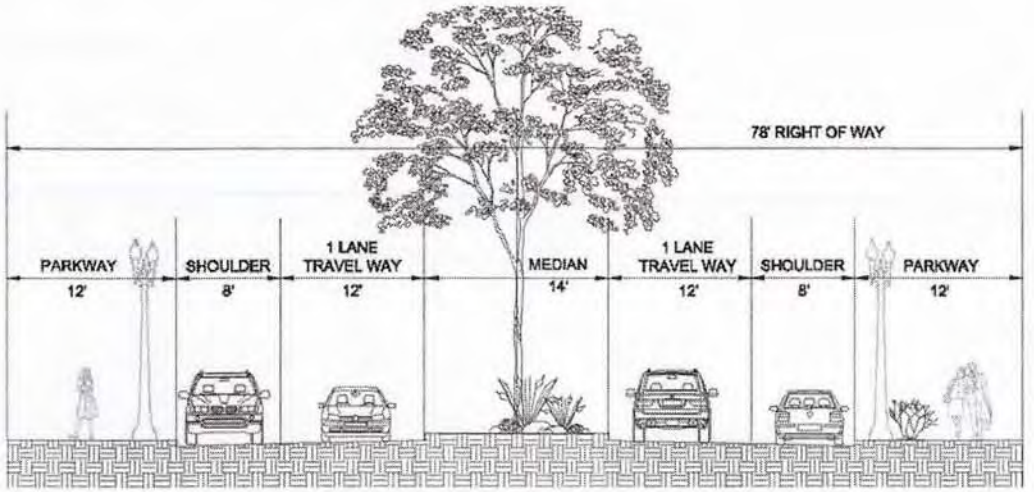
2.3A - Minor Collector with Raised Median has a raised or depressed median with dedicated turn lanes and controlled turn movements that improve traffic flow and add rural character when the median is landscaped.

2.3B - Minor Collector with Intermittent Turn Lane improves traffic flow in areas with multiple curb cuts.

2.3C – Minor Collector has no additional features and is primarily intended for residential neighborhoods or for rural areas with steep slopes and physical constraints.

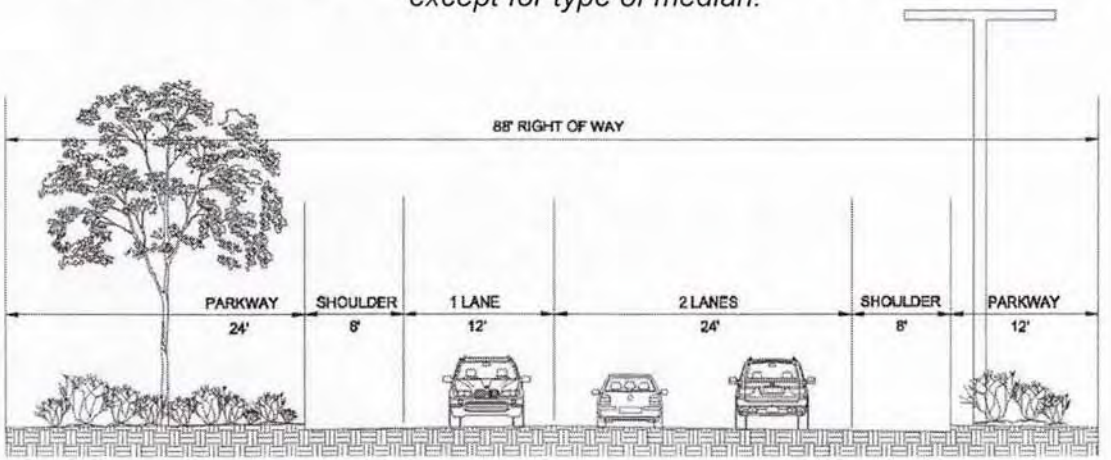
	Minor Collector Series: Minimum Standards			Description
	2.3A Raised Median	**2.3B** Intermittent Turn Lane	**2.3C** (No Features)	
Design Speed	35 mph	35 mph	35 mph	
Threshold Capacity (ADT)	8,000 ADT	8,000 ADT	7,000 ADT	
ROW	82 '	82 '	68 '	Wider ROW required for bike lanes.
Travel Way	24'	24'	24'	2 travel lanes, 12' each
Medians	14'	14'	None	Median is typically raised or depressed with optional surface treatments or landscaping
Shoulder	8'	8'	8'	Add 5' for bike lanes, if required
Parkway	14'	14'	14'	Parkway includes landscaping, utilities, trails or bicycle paths, as required

TYPICAL CROSS SECTIONS
2.2 Light Collector Series



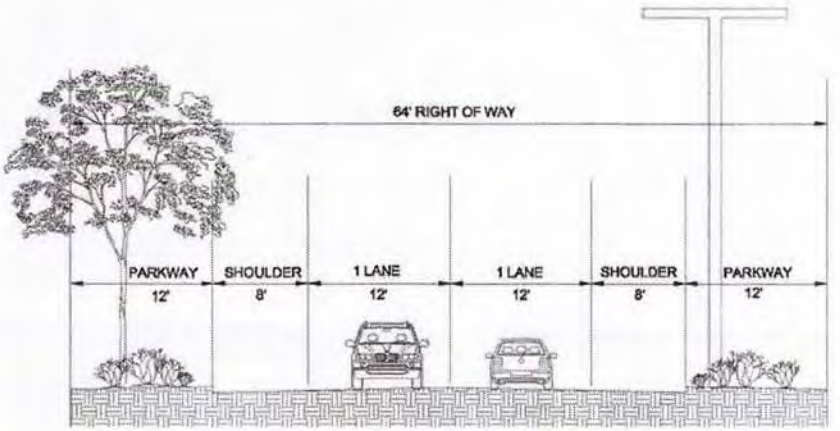
2.2A - Light Collector with Raised Median

Cross Section for 2.2B, Light Collector with Continuous Turn Lane, is similar except for type of median.



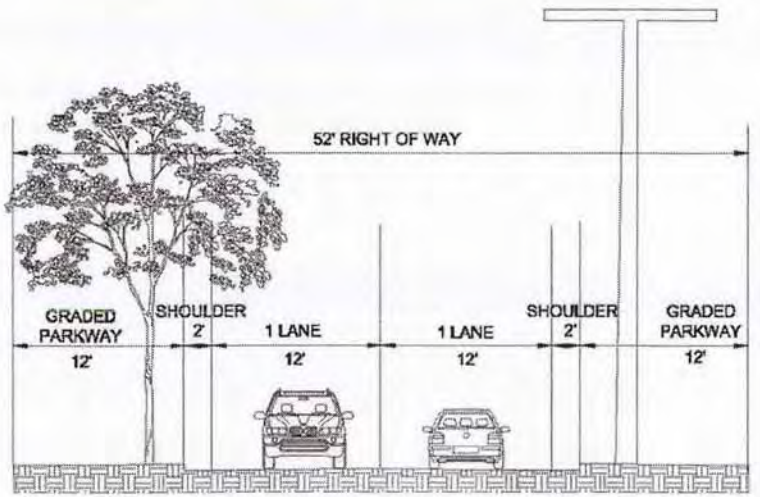
2.2D - Light Collector with Passing Lane Option

Shown with passing lane in one direction.



2.2E - Light Collector

Cross section for 2.2 C is similar except at intersections, which contain a 14' dedicated turn lane that produces a wider ROW.



2.2F - Light Collector with Reduced Shoulder

2.1 Community Collector
2.2 Minor Collector Series

Typical cross sections for the Community Collector and Minor Collector series are the same as those shown for the Light Collector Series *except* for the parkway width and right-of-way. Typical parkway widths are:

- 2.1 Community Collector = 10'
- 2.2 Light Collector = 12'
- 2.3 Minor Collector = 14'

Note: The minimum ROW for a 2.2 Light Collector and 2.3 Minor Collector may be reduced if located in an area that is already developed. A reduced ROW can be achieved by using a 10' minimum parkway. This solution should not be used where adequate ROW is available for the 12' or 14' parkway standard.

Glossary of Terms

Alignment: A planning term used to identify the general location of a current or future roadway. For future roadways, it is intended to describe a designated area or buffer set aside so a specific alignment can be determined as the need is established.

Average Daily Trips (ADT's): The total traffic volume during a given period divided by the number of days in that period. ADT volumes can be determined by continuous traffic counts or periodic counts.

Bike Lanes: Bike lanes are paved areas located between the travel lane(s) and shoulder. Bike lane locations are identified on the County's Bicycle Master Plan, and will require wider paved shoulders and outside travel way.

Curve Radius: A geometric design feature of the roadway. The curve radius can determine safety features and design speed of a given segment of road.

Capacity: The measure of a transportation facility's ability to accommodate a moving stream of people or vehicles in a given time period. Capacity and Level of Service (LOS) are analyzed separately and are not simply related to each other; both must be fully considered to evaluate the overall operation of a facility.

Collector: Collector roads are designed to collect traffic from local streets and direct that traffic into larger arterials or regional expressways. In rural areas, collector routes serve intra-county rather than statewide travel. In urban areas, collector streets provide direct access to neighborhoods and arterials.

Design Speed: The design speed of a roadway dictates which geometric design standards are used such as stopping sight distance, radius of curves, and banking (super-elevation) of road surfaces.

Expressway: A controlled access, divided arterial highway for through traffic, the intersections of which are usually separated from other roadways by differing grades.

Freeway: A divided arterial highway designed for the unimpeded flow of large traffic volumes. Access to a freeway is rigorously controlled and intersection grade separations are required.

Grade: The slope (ratio of change in elevation to change in distance) of a roadway typically given in percent. *For example, a 2% grade represents 2-feet of elevation change over a 100-foot distance.*

Level of Service: A qualitative measure describing operational conditions within a traffic stream and the motorists' perceptions of those conditions. For example, LOS A represents free flow, almost complete freedom to maneuver within the traffic stream. LOS F represents forced flow, more vehicles are attempting to use the freeway than can be served resulting in stop and go traffic.

Local Road/Street: A road or street intended for access to adjacent properties.

Median: The portion of the roadway that separates opposing directions of traffic. It can be raised, landscaped or level with the roadway, with turn features added intermittently or used as a continuous left turn lane.

Multimodal (transportation): Generally refers to all modes of transportation, including motorized and non-motorized forms. Non-motorized modes within the unincorporated County typically include bus transit, pedestrian walking or jogging, biking, and equestrian movements.

Right of Way (ROW): The overall width of the roadway components, technically the area from property line to property line. These areas are predominately used for vehicular transportation and may also contain pedestrian walkway, utility easements, railroad crossings, and/or on-street parking areas.

Road Bed – The specified width of pavement of the roadbed measured from curb face to curb face. In the absence of curbs, the pavement width is measured from the edges of the roadbed. The roadbed or pavement width is typically utilized for vehicular traffic.

Parkway: The area from shoulder edge to the property line. Parkway width requirements can increase if bike lanes or other facilities/amenities are indicated on countywide master plans.

Public Road: Any road under the jurisdiction of and maintained by a public authority such as Federal, State or County jurisdictions, which is open to public travel.

Shoulder: The area between the travel lanes and the parkway, which is usually set aside for parking, bicycle lanes and emergency pull-off.

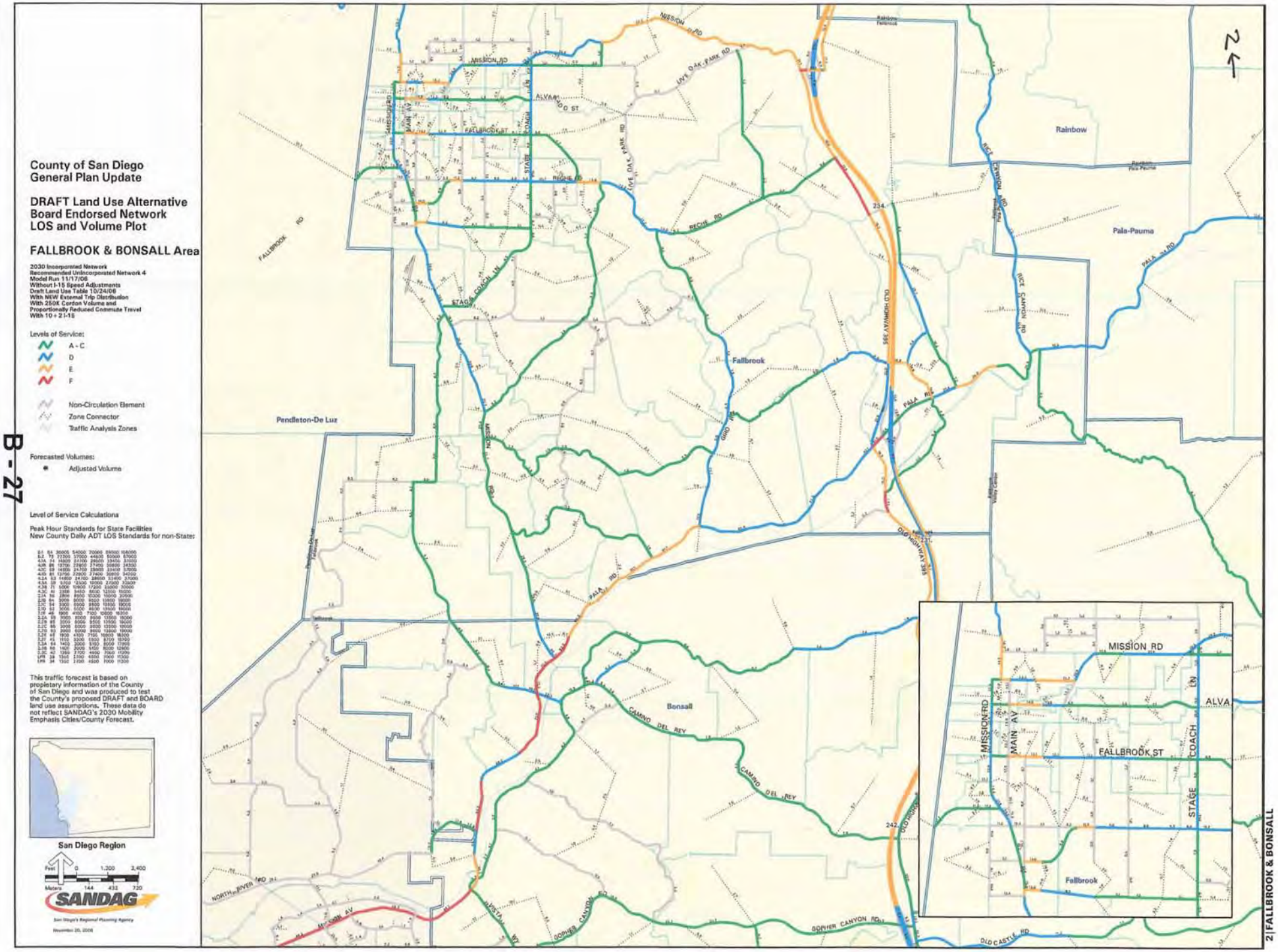
Sidewalk: A paved pedestrian walkway, generally located within the parkway.

Trail: A marked, graded or paved non-motorized path, typically removed from vehicular roadways that are primarily recreational in nature. Trails can also serve as alternative modes of transportation. Trail characteristics vary depending upon location and type of use.

Threshold Capacity: The maximum capacity a road can carry at an acceptable level of service (defined by County policy as LOS A through D). Traffic volumes above this threshold indicate an unacceptable level of service (LOS E, F).

Travelled Way: The lanes of a roadway which the moving vehicles travel; does not include medians.

GP2020 – 2030 Traffic Forecasts for Pala-Pauma



B - 27

2 | FALLBROOK & BONSALL

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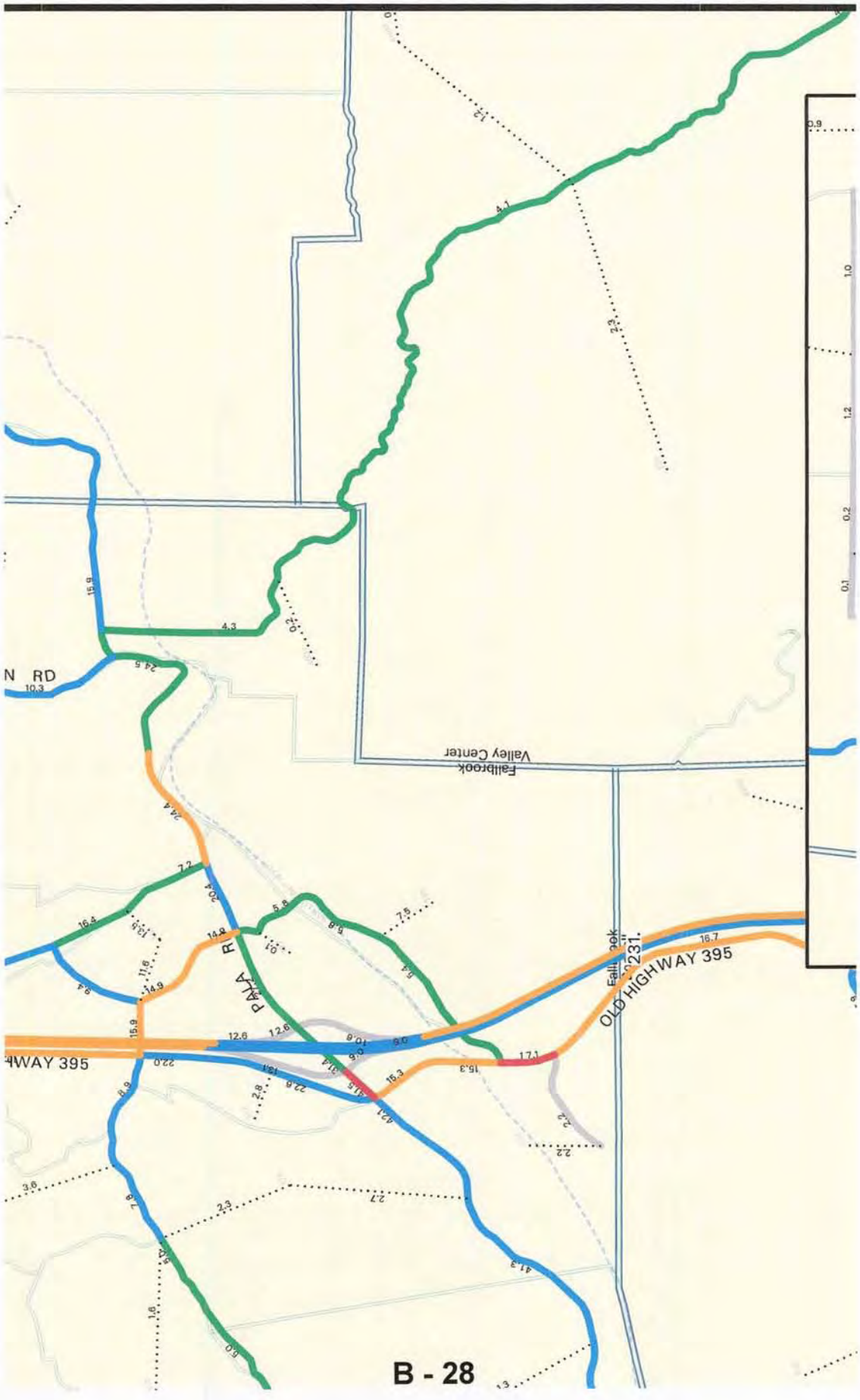

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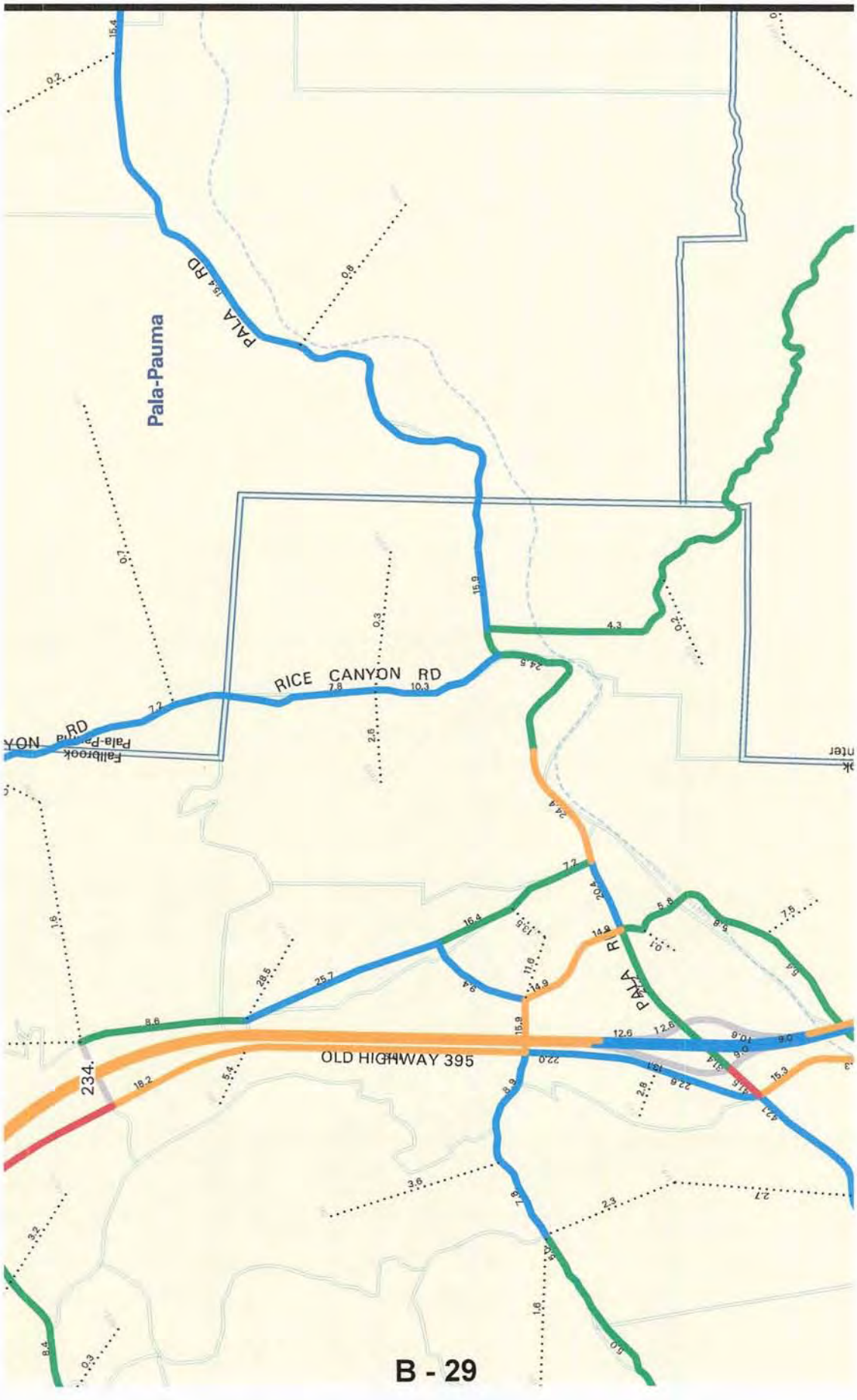
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PALA R
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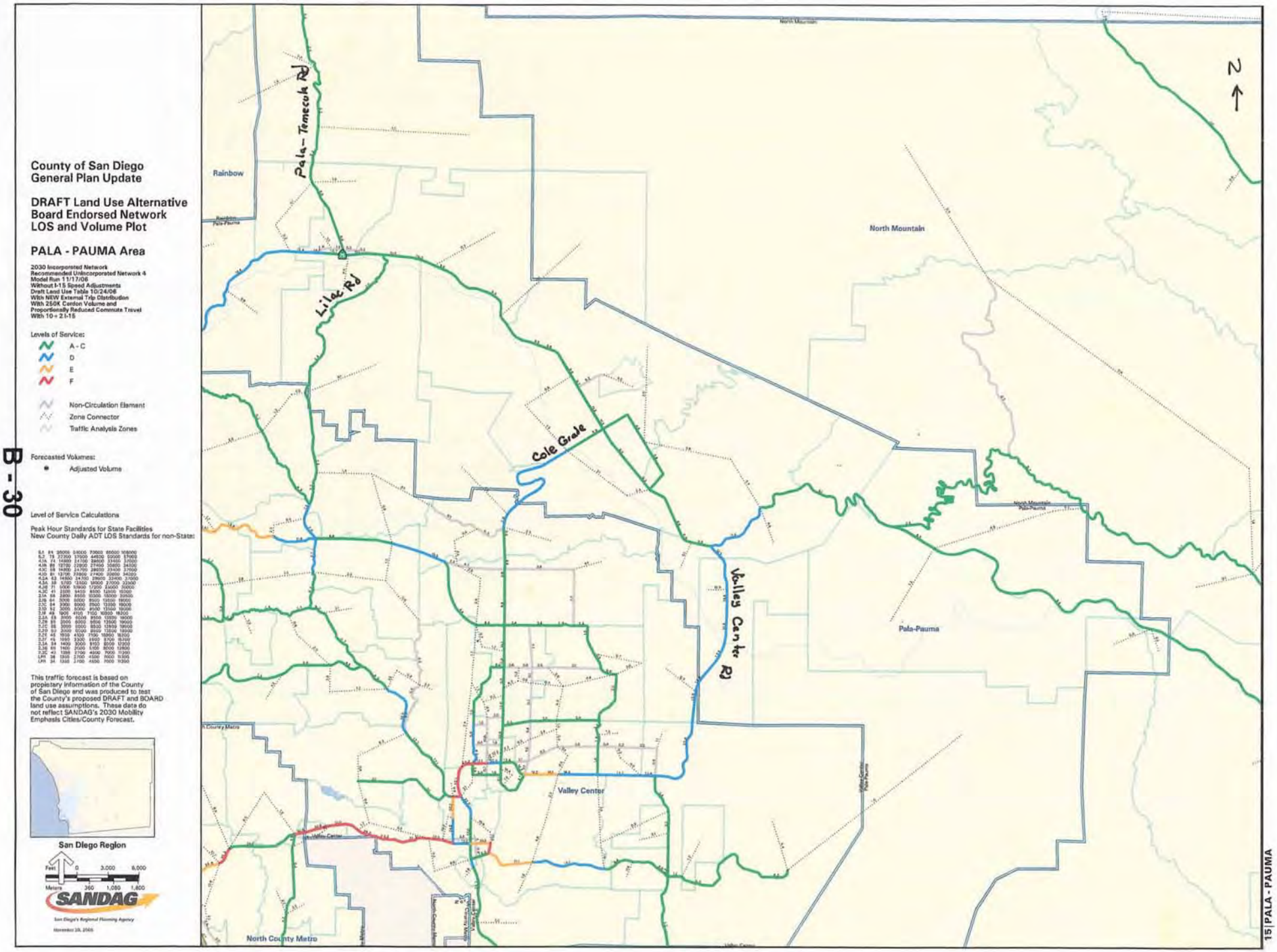
County of San Diego
General Plan Update
DRAFT Land Use Alternative
Board Endorsed Network
LOS and Volume Plot
PALA - PAUMA Area
2030 Incorporated Network
Recommended Unincorporated Network 4
Model Run 11/17/06
Without I-15 Speed Adjustments
Draft Land Use Table 10/24/06
With NEW External Trip Distribution
With 250K Canton Volume and
Proportionally Reduced Commute Travel
With 10 + 2 I-15
Levels of Service:
A - C
D
E
F
Non-Circulation Element
Zone Connector
Traffic Analysis Zones
Forecasted Volumes:
Adjusted Volume
Level of Service Calculations
Peak Hour Standards for State Facilities
New County Daily ADT LOS Standards for non-State
This traffic forecast is based on
propietary information of the County
of San Diego and was produced to test
the County's proposed DRAFT and BOARD
land use assumptions. These data do
not reflect SANDAG's 2030 Mobility
Emphasis Cities/County Forecast.
San Diego Region
Feet 0 3,000 6,000
Meters 360 1,080 1,800
SANDAG
San Diego's Regional Planning Agency
November 28, 2006
Rainbow
Pala - Temecula Rd
Lilac Rd
North Mountain
Cole Grade
Valley Center Rd
Pala-Pauma
Valley Center
North County Metro
N
2


Rainbow
Rainbow
Pala-Pauma
Pala-Temecula Rd
Lilac Rd
76
5.2
1.9
6.6
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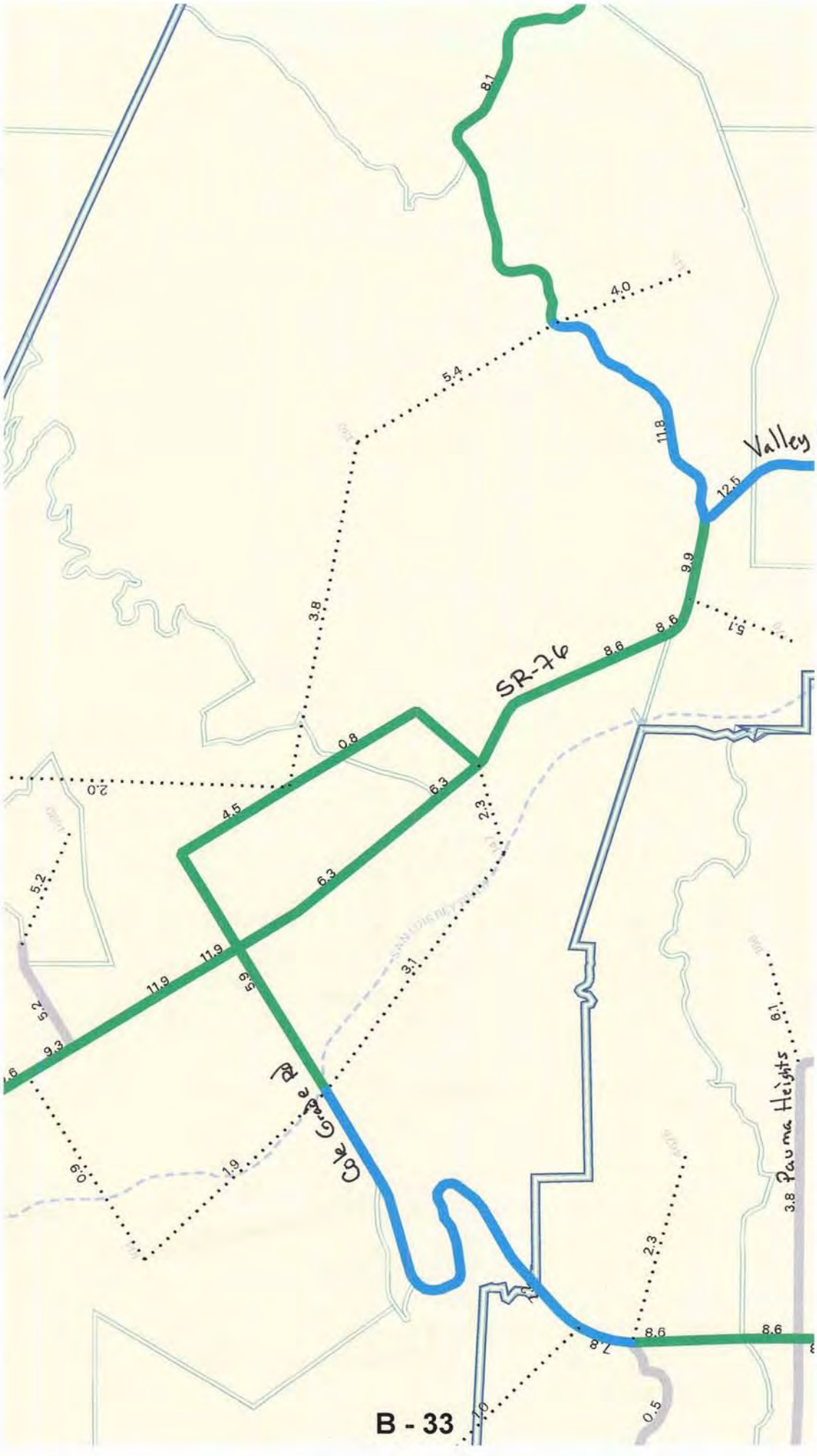
0.2
1.1
1.9
1.5
0.3
0.3
15.4
14.7
14.7
11.1
10.0
10.0
0.7
9.6
9.6
15.4
8.6
2.4
0.8
SAN LUIS REY RIVER
N


2
Cole Creek Rd
Lilac Rd
76
B - 32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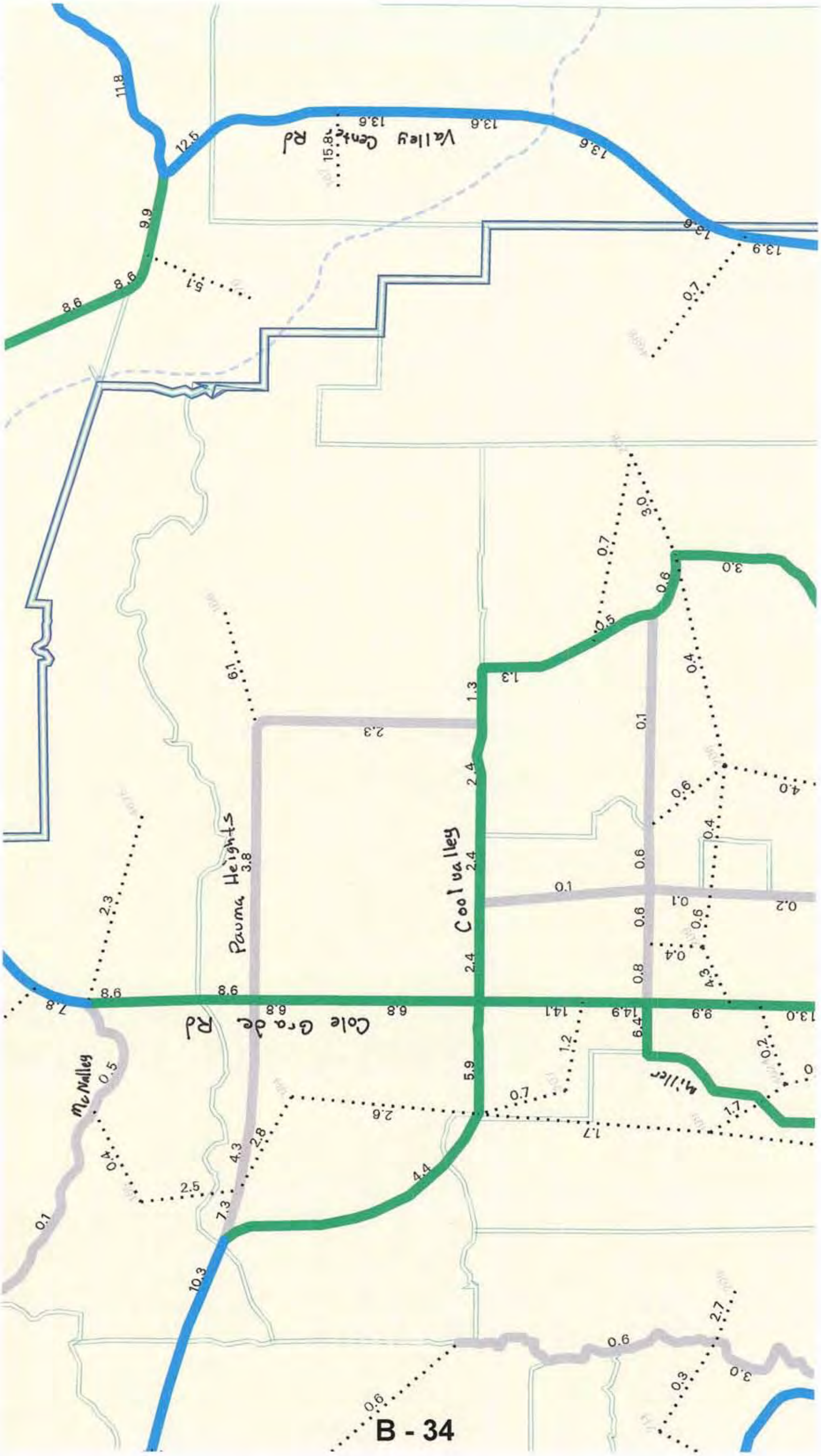
Valley Center Rd
SR-76
Pauma Heights
B - 33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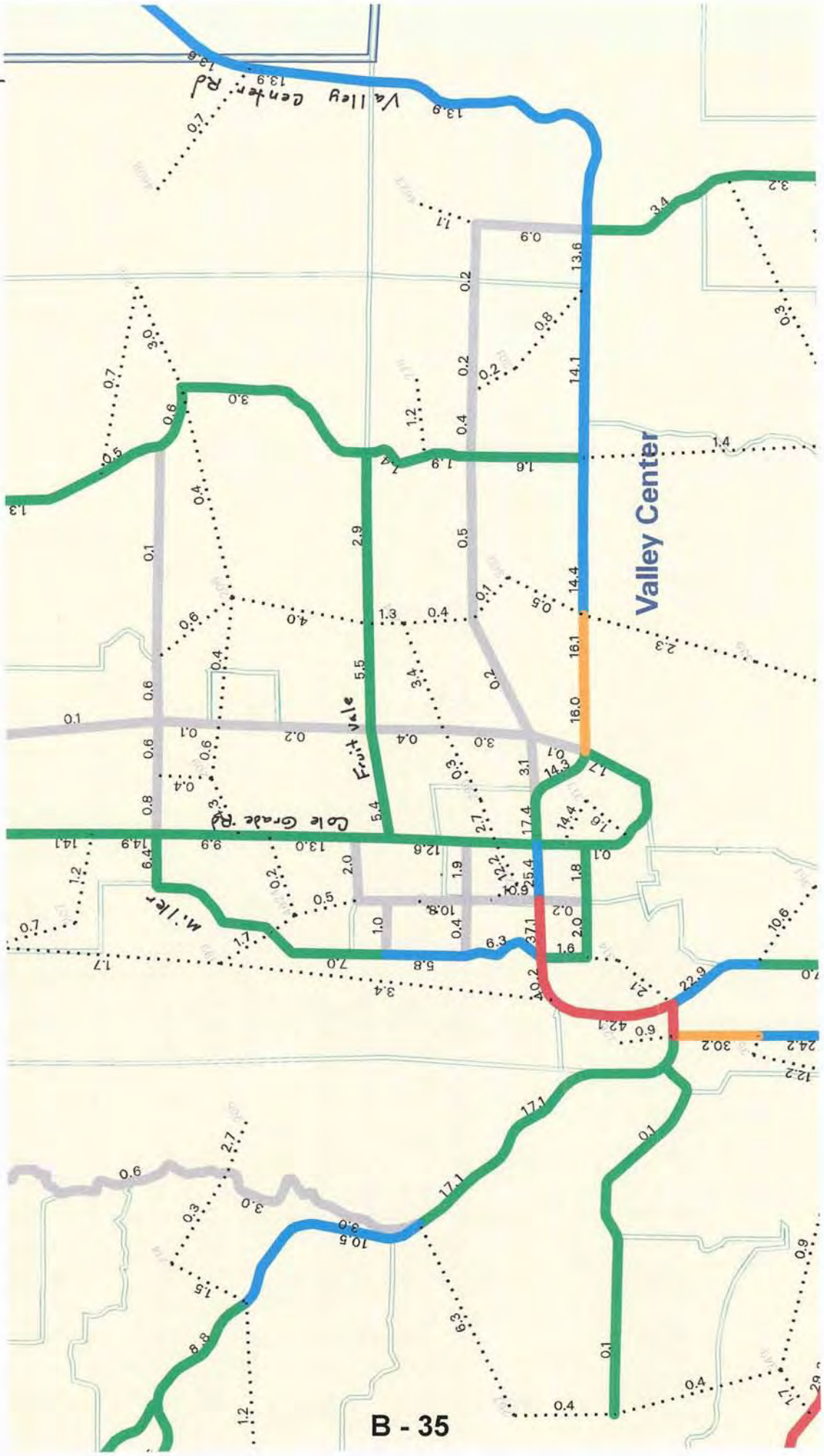
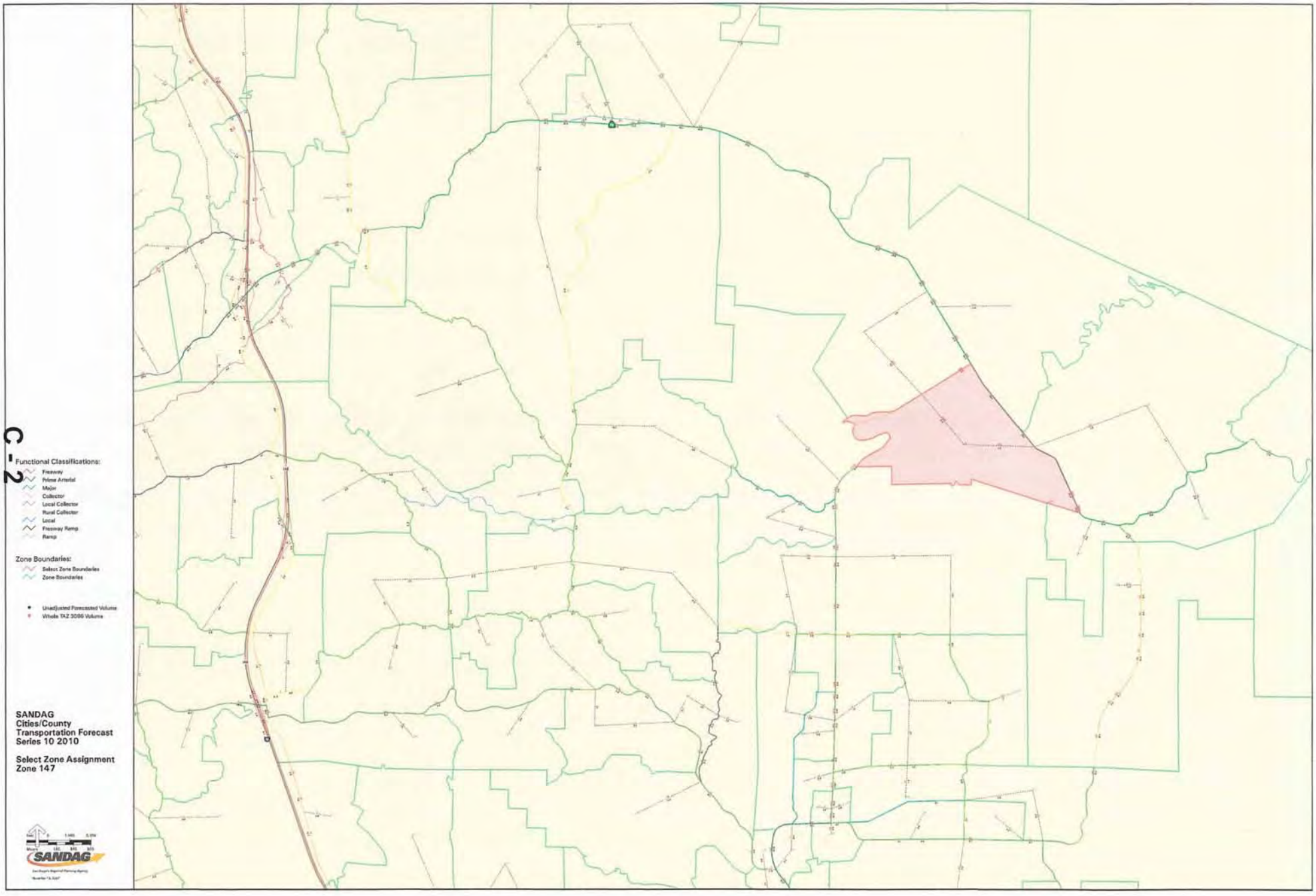
Pauma Heights
Cool valley
Cole Grade Rd
McNalley
Miller

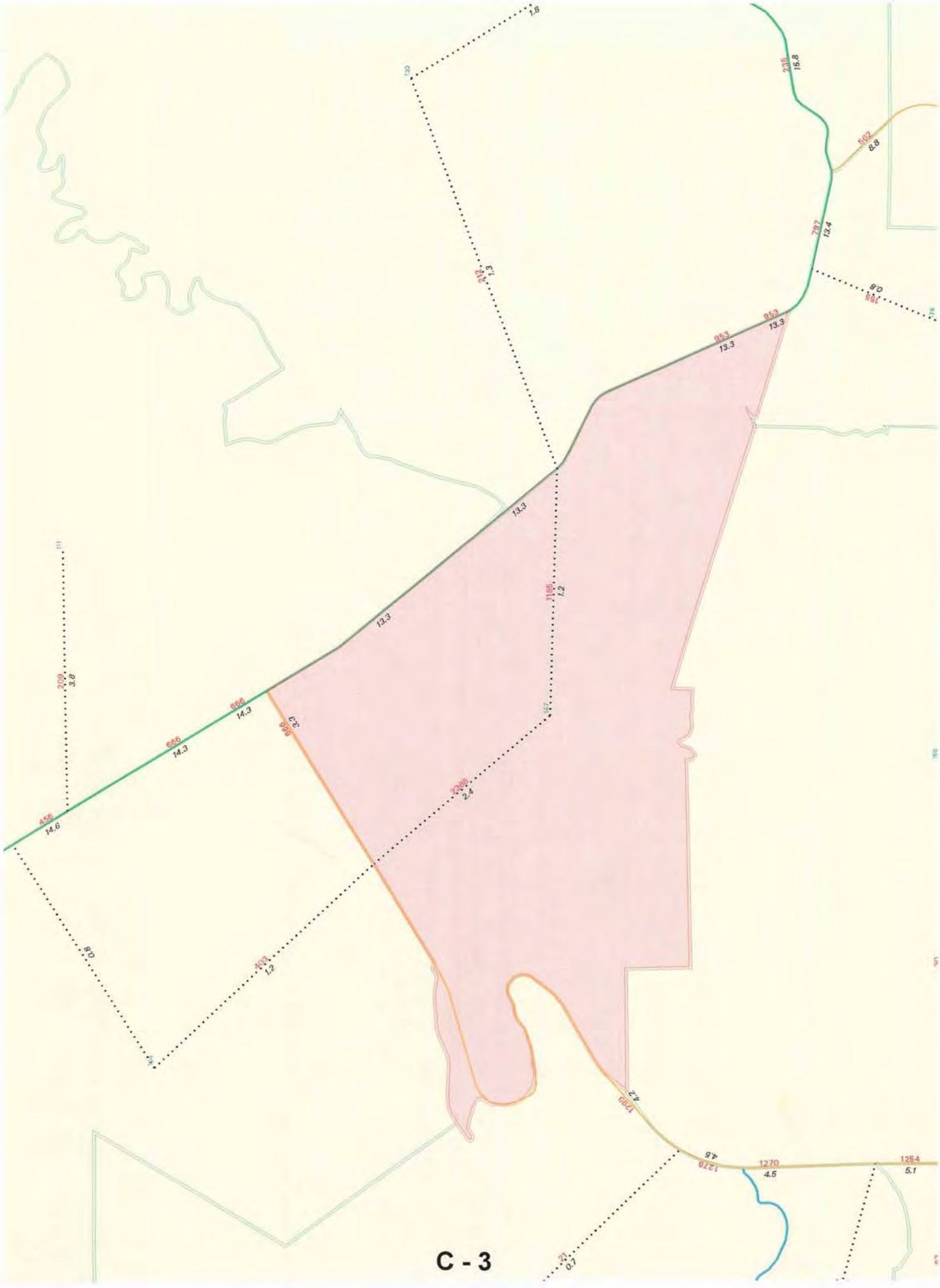

Valley Center
Fruit Vale
Cole Grade Rd
Valley Center Rd
2

APPENDIX C

- SANDAG 2010 Select Zone
- SANDAG 2030 Forecasts

SANDAG 2010 Select Zone


Functional Classifications:
Freeway
Prime Arterial
Major
Collector
Local Collector
Rural Collector
Local
Freeway Ramp
Ramp
Zone Boundaries:
Select Zone Boundaries
Zone Boundaries
Unadjusted Forecasted Volume
Whole TAZ 3086 Volume
SANDAG
Cities/County
Transportation Forecast
Series 10 2010
Select Zone Assignment
Zone 147
SANDAG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14.3
456
14.6
8.0
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4.5
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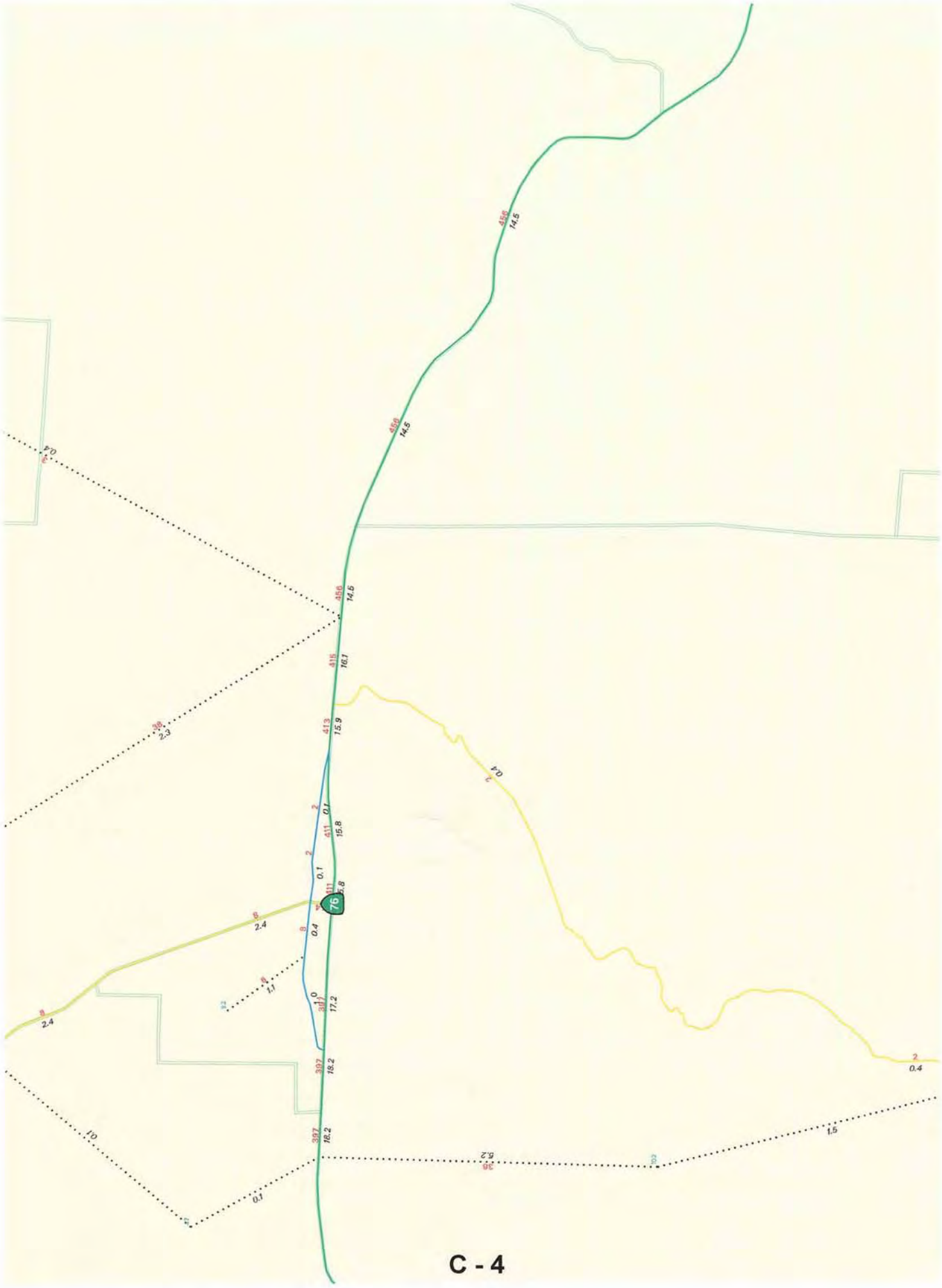
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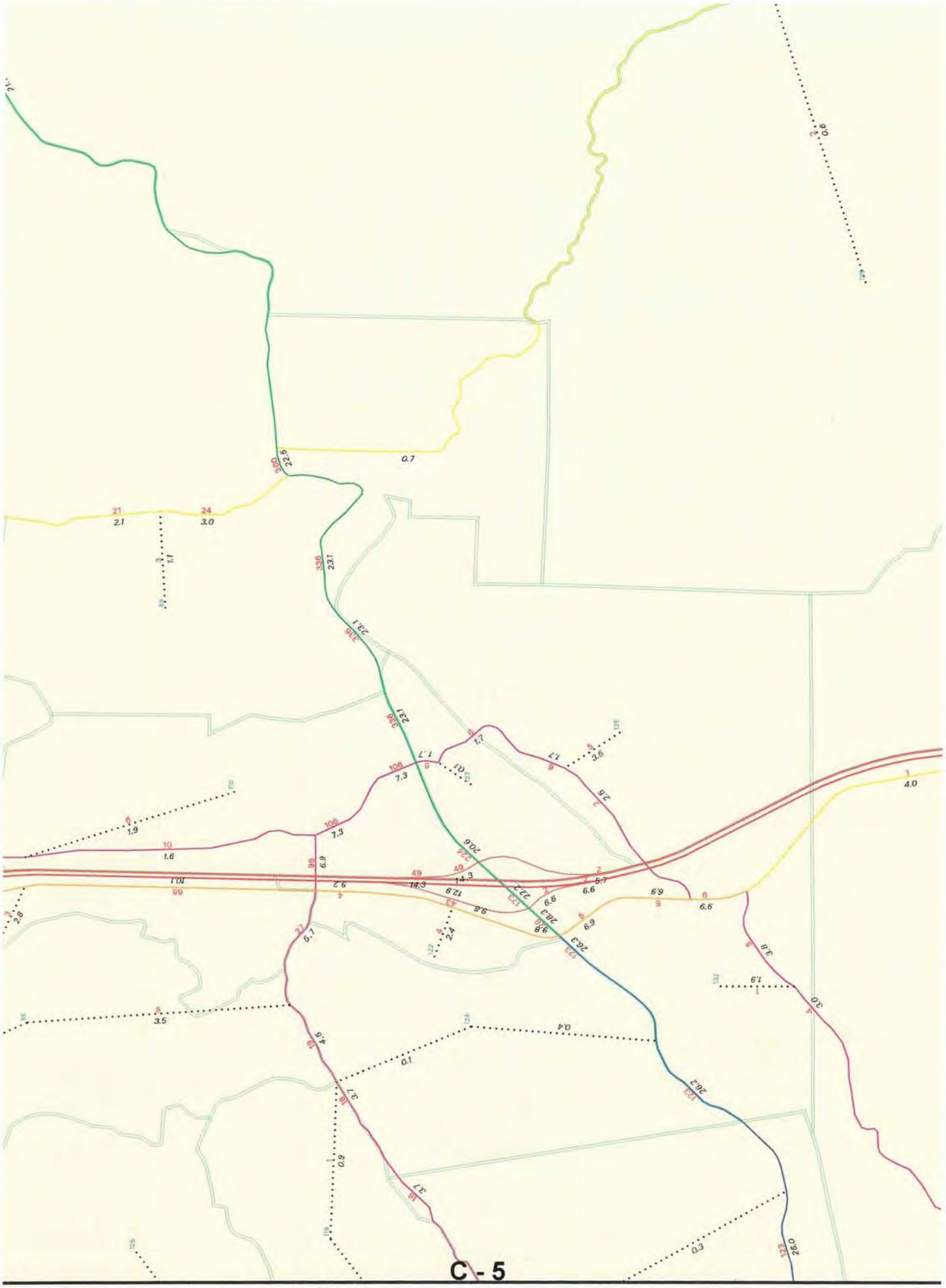
18.2

C - 4



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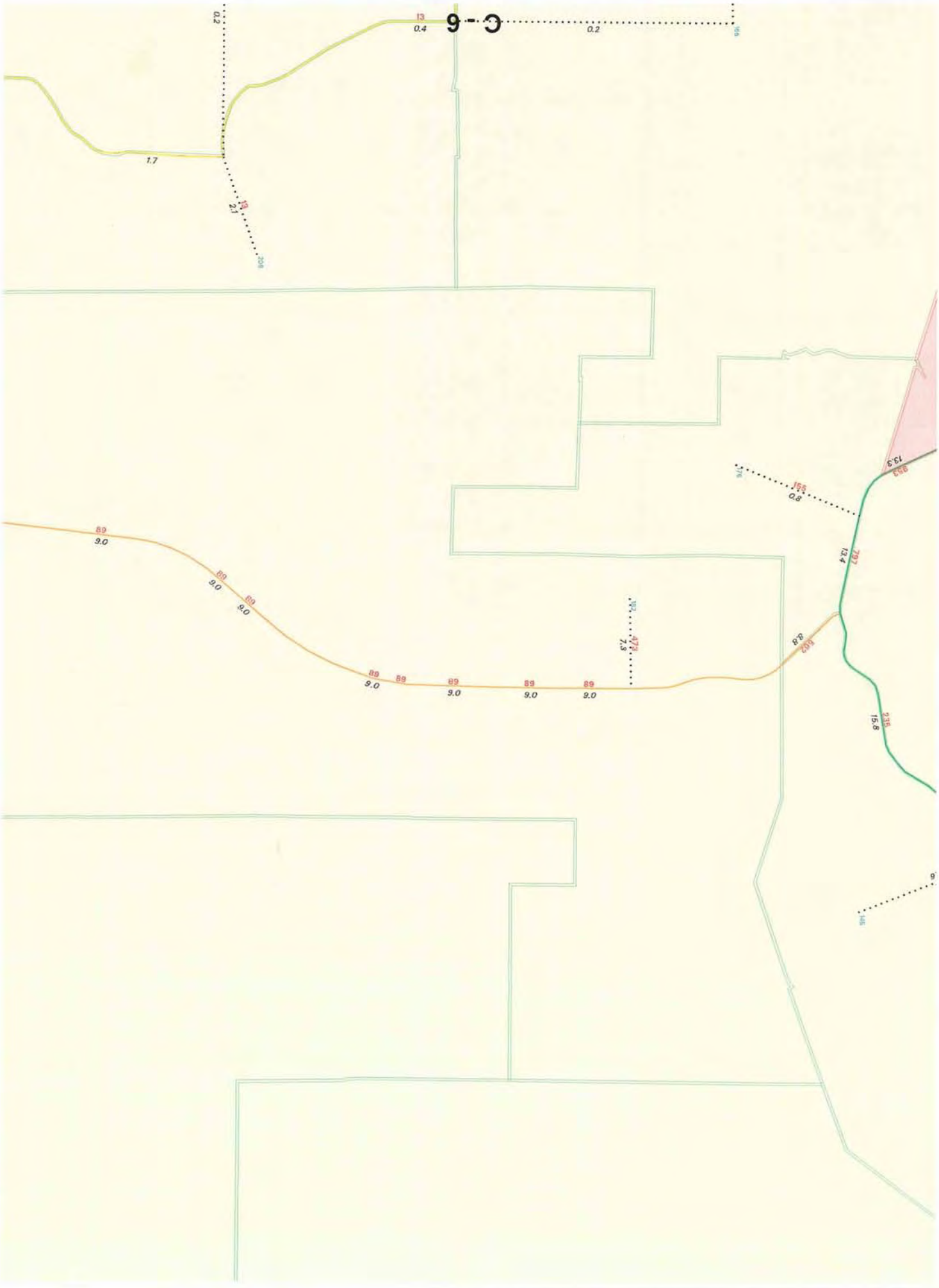
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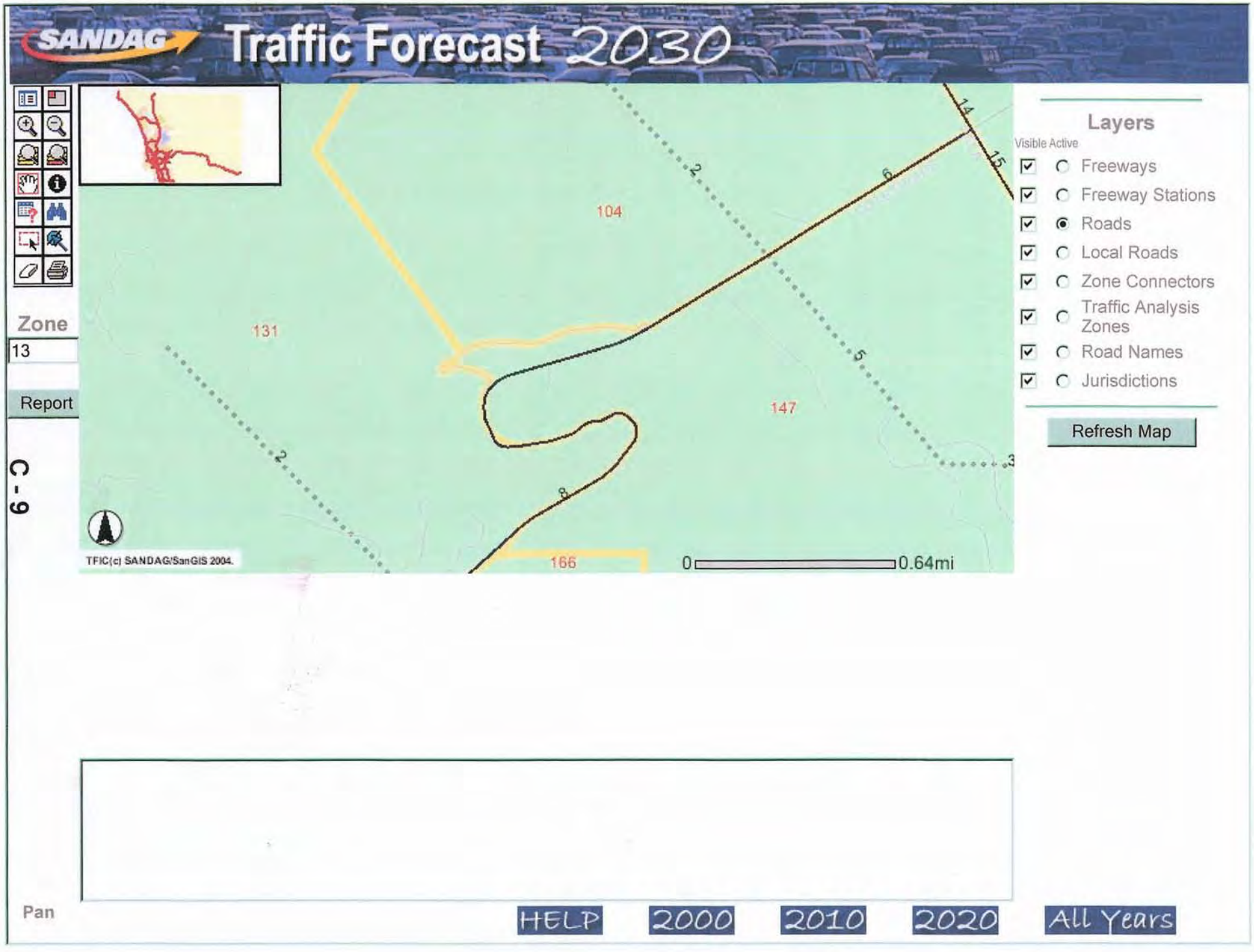
C - 7

SANDAG 2030 Forecasts


SANDAG
Traffic Forecast 2030
Zone
13
Report
Layers
Visible Active
Freeways
Freeway Stations
Roads
Local Roads
Zone Connectors
Traffic Analysis Zones
Road Names
Jurisdictions
Refresh Map
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131
147
166
TFIC(c) SANDAG\SanGIS 2004.
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HELP
2000
2010
2020
All Years

SANDAG Traffic Forecast 2030

Zone

13

Report

C - 10

Layers

Visible Active

- Freeways
- Freeway Stations
- Roads
- Local Roads
- Zone Connectors
- Traffic Analysis Zones
- Road Names
- Jurisdictions

Refresh Map

Pan

HELP 2000 2010 2020 All Years

SANDAG **Traffic Forecast 2030**

Zone

13

Report

Layers

Visible Active

- Freeways
- Freeway Stations
- Roads
- Local Roads
- Zone Connectors
- Traffic Analysis Zones
- Road Names
- Jurisdictions

Refresh Map

Pan

HELP 2000 2010 2020 All Years

SANDAG Traffic Forecast 2030

Zone
13
Report

Layers
Visible Active
- Freeways
- Freeway Stations
- Roads
- Local Roads
- Zone Connectors
- Traffic Analysis Zones
- Road Names
- Jurisdictions

Refresh Map

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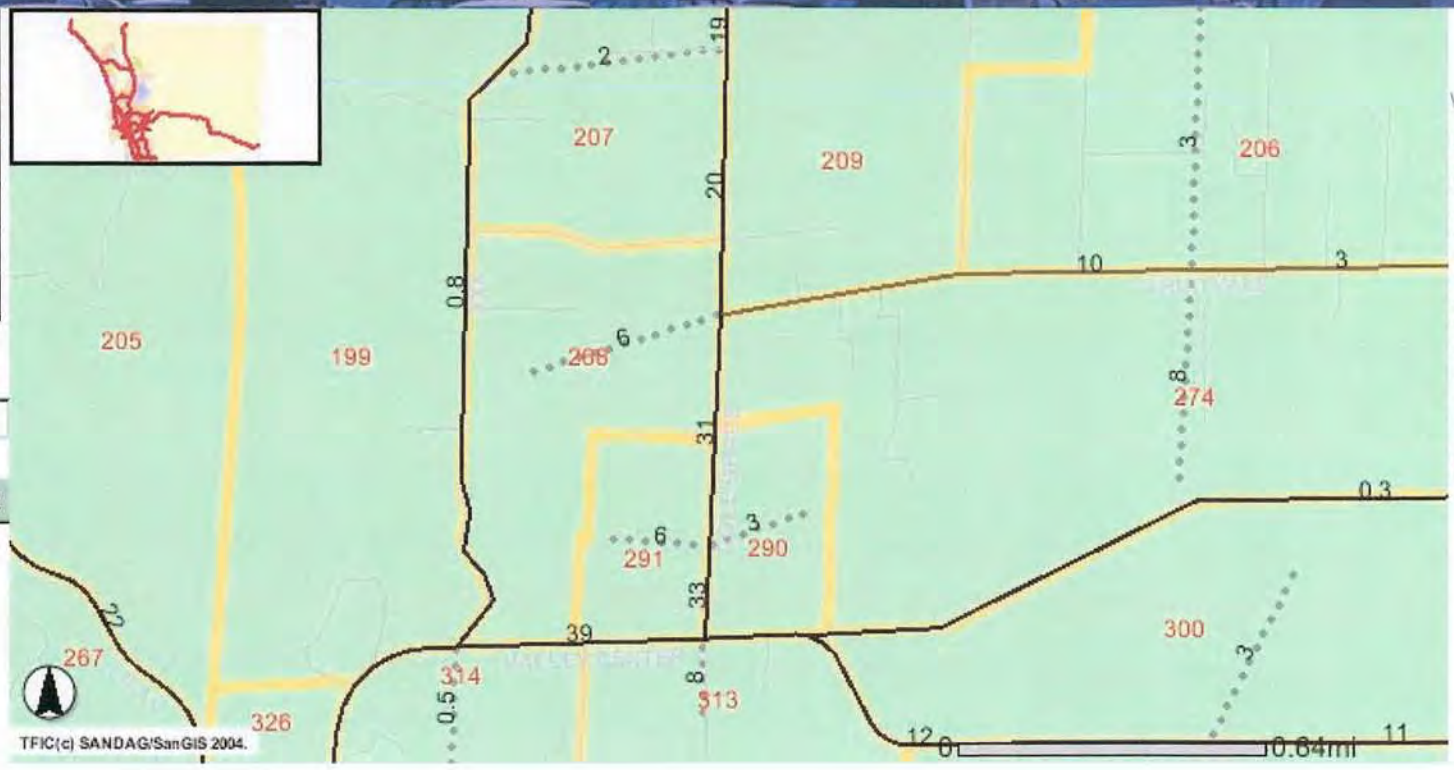
C - 12

SANDAG Traffic Forecast 2030



Zone

13

Report

C - 13

Layers

Visible Active

- Freeways
- Freeway Stations
- Roads
- Local Roads
- Zone Connectors
- Traffic Analysis Zones
- Road Names
- Jurisdictions

Refresh Map

Identify

HELP 2000 2010 2020 All Years

APPENDIX D

- Excerpts from the County of San Diego's TIF Program

COUNTY OF SAN DIEGO

TRANSPORTATION IMPACT FEE

TIF PROGRAM UPDATE

JANUARY 2008

P-1

List of Tables

List of Figures

Appendices

EXECUTIVE SUMMARY

BACKGROUND

Working with stakeholder groups, the County of San Diego (County) identified the need to develop a County transportation impact fee (TIF) program to mitigate the cumulative traffic impacts of development throughout the unincorporated areas of the County. The TIF program, approved by the Board of Supervisors in 2005 pursuant to the provisions of Government Code §§ 66000 et seq. (Mitigation Fee Act or the "Act"), funds the improvement and/or construction of identified transportation facilities and allocates the associated costs equitably among future developing properties. The TIF program does not collect funding to address existing roadway deficiencies.

The 2008 TIF Update utilizes the same core methodology and land use assumptions as the 2005 TIF program as outlined in prior reports titled "County of San Diego Transportation Impact Fee Report" dated January 2005, "Fallbrook and Ramona Transportation Impact Fee Report" dated January 2005 and the addendums to the reports dated March 2005 and September 2005 (collectively referred to as "Prior Reports").

PURPOSE

The purpose of this report is to document recommendations for updating the 2005 TIF program pursuant to the provisions of the Act. The current update focused on the following:

- Evaluating the non-residential rates
- Evaluating potential cost savings and/or other revenue sources
- Adding freeway interchanges/ramps and at-grade highway intersections to the TIF program
- Identifying program changes to facilitate easier administration
- Providing additional detail regarding TIF roadway segment limits

The overall objectives of the update included 1) preserving the integrity of the TIF program, and 2) maintaining CEQA compliance regarding cumulative impacts.

RECOMMENDED TIF RATES

The TIF program differentiates between "local" transportation facilities (collectors and minor streets) that benefit primarily the community in which they are located, and "regional" facilities (state routes, prime arterials, major roads, and other regionally significant roadways) that benefit both the community and surrounding area – in this case identified as the North, South or East regions. A different TIF rate is applied to each community based upon growth and related transportation needs. The rates are comprised of a local component and a regional component. The interchange/ramp and highway intersection improvements are identified as "regional" facilities within each of the three regions.

Based on recommended program adjustments, cost reductions and additional revenues, $826 million of revenue will need to be generated by the TIF program. The recommended update and resulting changes result in residential rates increasing by no more than three and one-half percent (3.5%) measured by cost per single family dwelling unit with the non-residential rates (measured by cost per trip) decreasing by 40% or more.

The update resulted in the following facility costs and recommended TIF rates:

- Local facilities totaling $370 million were identified, including streets of collector classification and below. This resulted in local TIF rates varying by community plan area (CPA) from $0 to $5,940 per single family dwelling unit.

- Regional facilities totaling $645 million were identified, including state routes, prime arterials, and major roads. This resulted in regional TIF rates per single family home of $5,942 for the North region, $3,294 for the South region, and $2,195 for the East region.

- Regional freeway interchange/ramp facilities costing a total of $303 million of which $105 million are related to growth were identified. Ten percent, typical of a local match, (or $10.5 million) in costs were identified to be included in the TIF program. This resulted in an additional component to the regional TIF rate of $41 for the North region, $150 for the South region, and $3 for the East region per single family home.

- Combining the local and regional components, total TIF rates vary from $2,199 to $12,295 per single family home.

As stated in the 2005 Report, further studies, including required environmental review, may result in the identification of different project alternatives with different costs. An update to the TIF program will likely be needed upon completion of the General Plan Update currently in progress. In addition, the TIF rates are indexed to adjust annually each January to keep up with future changes in the costs of construction.

INTRODUCTION

OVERVIEW

The County of San Diego (County) identified the need for additional transportation improvements to address the projected cumulative traffic impacts of future development within the unincorporated area (see **Figure 1**). In 2005, the Board of Supervisors approved a transportation impact fee (TIF) program. The purpose of the TIF program is to fund construction of identified transportation facilities, and allocate the costs equitably among future developing properties.

TRANSPORTATION IMPACT FEES

An impact fee is a commonly used and well-accepted means of mitigating the impacts to public facilities and infrastructure created by future growth. As part of the TIF program process, the transportation infrastructure needs were characterized as either existing deficiencies, direct impacts of future development, or indirect (cumulative) impacts of future development. Existing roadway deficiencies are the responsibility of existing developed land uses and government agencies and can not be financed with impact fees. The proposed TIF program is not intended to mitigate direct impacts which will continue to be the responsibility of individual development projects. The TIF program therefore is designed to address the cumulative impacts associated with new growth.

The rationale supporting development of the County TIF program is future development in the unincorporated area being required by law to mitigate cumulative traffic impacts on the County's road network. Without a TIF, future development would cause a continued decrease in roadway level-of-service with overall network capacity falling behind the needs of future growth. A TIF program is a suitable mechanism for identifying needed transportation facilities to mitigate these cumulative traffic impacts and allocating the associated costs in an equitable manner.

This report is an update to the Prior Reports. The County TIF program assesses the fee on all new development that results in new/added traffic. The primary purpose of the TIF is twofold: (1) to fund the construction of identified facilities needed to reduce, or mitigate, projected cumulative traffic impacts resulting from future development within the County; and (2) to allocate the costs of these facilities proportionally among future developing properties based upon traffic contribution.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts. To that end, local agencies generally require that a project's potential direct and cumulative impacts and corresponding mitigation measures, be identified as part of the required environmental review process.

CUMULATIVE IMPACTS

Cumulative impacts are those impacts caused collectively by all development within the community. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time (CEQA Guidelines §15355). The CEQA Guidelines recognize that mitigation for cumulative impacts may involve the adoption of ordinances or regulations (CEQA Guidelines §15130).

Recognizing that an individual development project is not wholly responsible for cumulative traffic impacts, each development project is required to contribute to mitigation in proportion to the project's estimated traffic generation. This report proposes the continued use of the TIF to fund improvements to identified transportation facilities in response to the total projected cumulative traffic impacts associated with future development within the County. Transportation facilities and other infrastructure necessary to either address existing deficiencies or mitigate the direct impacts of a given development project are not within the scope of the TIF.

ENVIRONMENTAL STUDIES & REVIEW

The facilities identified in this report are intended to provide increased road capacity to mitigate the cumulative traffic impacts of future development. No facilities will actually be constructed until all necessary environmental reviews have been conducted. Further studies, including environmental review, may show superior alternative projects that also satisfy the increased capacity need.

EXEMPTION FROM CEQA REQUIREMENTS

The fees collected through the TIF will be used for capital projects for transportation infrastructure projects necessary to maintain service within the unincorporated County. The County has determined that the act of adopting the proposed County TIF program and establishing the proposed TIF rates is statutorily exempt from the requirements of CEQA under §15273(a)(4) of the CEQA Guidelines.

STATUTORY FRAMEWORK

Development and implementation of impact fees must conform to the statutory requirements of California Government Code §§66000 et seq. (commonly referred to as the "Mitigation Fee Act"). Prior to establishing, increasing or imposing an impact fee, the Mitigation Fee Act requires the local agency to make the following findings:

- Identify the purpose of the fee (§66001(a) (1)).
- Identify the use for the fee and the facilities to be built (§66001(a) (2)).
- Determine a reasonable relationship between the fee's use and the type of development project on which the fee is imposed (§66001(a) (3)).
- Determine a reasonable relationship between the need for the public facility and the type of development project (§66001(a) (4)).
- Determine a reasonable relationship between the amount of the fee and the cost of the facility attributable to development (§66001(b)).

For purposes of the County TIF program, a statement of requisite findings is presented in the "Program Implementation" section of this report.

FEE DEVELOPMENT PROCESS

The remainder of this report summarizes the basis for the TIF program and the recommended changes resulting in updated fee rates:

- Development Forecast
- Facilities and Costs
- Fee Methodology
- Funding Requirements
- Proposed Fee Schedule
- Program Implementation

TIF Analysis

This report documents recommendation for updating to the 2005 TIF program. Unless otherwise outlined in the report, growth and facility needs are the same as identified in the Prior Reports. This section reiterates the trip growth forecast and required roadway facilities to suitably address cumulative traffic impacts. The 2008 TIF Update report also describes the changes to the program including:

- Identified program cost reductions due to changing roadway standards.
- Costed Direct Project mitigations by non-residential projects.
- Identified additional revenue available to the County to offset the costs to non-residential projects.
- Clarified TIF roadway segment limits.
- Revised TIF rate tables.

GROWTH FORECAST

Analysis of land use changes between 2004 and build-out, as outlined in the Prior Reports, provided the basis for determining both the amount of expected future development and the types of transportation improvements needed to address cumulative traffic impacts consistent with the SANDAG Transportation Model. For fee calculation purposes, uniform trip generation rates per land use category were applied to the various land uses to estimate growth related trips and equitably allocate the fee between the various land uses. Based on typical trip generation rates, shown in **Table 1**, and the identified forecast growth, both identified in the Prior Reports, the trips attributable to future development are shown in **Table 2**.

TABLE 1
TRIP GENERATION RATES

LAND USE	Trip Rate (1)
Single Family Residential	12 trips/unit
Multi-Family Residential	5 – 8 trips/unit
Commercial/Services	360 trips/acre
Industrial	150 trips/acre
Office	300 trips/acre
Parks	5 trips/acre
Roads & Freeways	0 trips/acre
Schools	50 trips/acre

(1) Based on adopted County TIF program.

TABLE 2
FORECAST TRIPS ATTRIBUTABLE TO FUTURE DEVELOPMENT

Community Planning Area	Forecast Trips by TIF Region (1)		
	North	South	East
Alpine		76,176	
Bonsall	33,852		
Central Mountain			7,992
County Islands		4,884	
Crest-Dehesa		6,468	
Desert			322,860
Fallbrook (2)(3)	166,140		
Jamul-Dulzura		74,676	
Julian			11,220
Lakeside		153,492	
Mountain Empire			112,092
North County Metro	184,992		
North Mountain			18,480
Otay		232,752	
Pala-Pauma	48,504		
Pendleton-De Luz	5,100		
Rainbow	27,912		
Ramona(2)			138,144
San Dieguito	117120		
Spring Valley		50,892	
Sweetwater		15,072	
Valle De Oro		21,348	
Valley Center	130,344		
TOTAL FUTURE TRIPS	**713,964**	**635,760**	**610,788**

(1) Forecast trips based on build-out projections per the 2005 TIF program.

(2) Fallbrook local rate based on 160,992 trips for 2004 to 2030 and Ramona local rate based on 118,824 trips for 2004 to 2030.

(3) An additional 5,076 trips is reflected for North Region (Fallbrook) based on the September 2005 Addendum (423 EDUs x 12 trips/EDU).

Trip generation rates are commonly used to apportion the benefits associated with transportation infrastructure improvements. Note that the Prior Reports made reference to Equivalent Dwelling Units (1 equivalent dwelling unit equaling 12 trips), but for simplicity this report references trips instead.

FACILITIES AND COSTS

The SANDAG Regional Transportation Model was utilized to analyze base year (Year 2000) and projected build-out development conditions on the roadway network throughout the unincorporated area of the County. The TIF modeling assumptions for the road network and projected land uses are summarized in the Prior Reports.

A list of County TIF program facilities (deficient Base Year road segments) is contained in **Appendix A**. The facilities identified in this report are intended to address future deficiencies in road capacity caused by the cumulative traffic impacts of future development. Further studies, including required environmental reviews, may result in the identification of other alternatives for dealing with cumulative traffic impacts. The County TIF program may be periodically reviewed and/or amended to permit funding the construction of these alternatives. The Appendix identifies the roadway segments and provides additional detail as to TIF roadway segment limits.

FREEWAY INTERCHANGES/RAMPS & AT-GRADE HIGHWAY INTERSECTIONS

As part of this update, the County identified specific Freeway ramp interchanges and at-grade highway intersections to be funded in part by the TIF program. These facilities were not included in the Prior Reports. Based on currently available traffic data, a number of freeway ramp interchanges and at-grade highway intersections were identified as necessary to accommodate growth. **Table 3** identifies the facility location, the percent of total 2030 traffic related to growth, and the resulting amount to be funded via the TIF program. Addition of these improvements will enable projects to meet its obligations regarding cumulative impacts via the TIF program. It should be noted that the overall cost is estimated on a per Region basis, recognizing that some of the costs will likely exceed the estimate while others may be lower than shown in the table.

Only 10% of future growth's costs for freeway interchanges/ramps are recommended to be included in the program. This percentage is representative of the typical local match required when competing for funds for these State highway improvements. Addition of these improvements will enable projects to meet their obligations regarding cumulative impacts via the TIF program. It should be noted that the overall cost is estimated on a per Region basis, recognizing that some of the costs will likely exceed the estimate while others may be lower than shown in the table.

TABLE 3
INTERCHANGES AND COSTS

Location	County Growth (%)	Proportional Cost	Region
I-8 EB/Lake Jennings Park Rd	45%	$516,000	South
I-8 WB/Lake Jenning Park Rd	49%	561,000	South
I-8 EB/Dunbar Ln	54%	618,000	South
I-8 WB/Dunbar Ln	57%	654,000	South
I-8 EB/Tavern Rd	40%	459,000	South
I-8 WB/Tavern Rd	58%	667,000	South
I-8 EB/W. Willows Rd	60%	686,000	South

Location	County Growth (%)	Proportional Cost	Region
I-8 WB/W. Willows Rd	65%	751,000	South
I-8 EB/Greenfield Dr. (El Cajon)	1%	7,000	South
I-8 WB/Greenfield Dr. (El Cajon)	3%	29,000	South
I-15 NB/E. Mission Rd	36%	418,000	North
I-15 SB/E. Mission Rd	36%	411,000	North
I-15 NB/Gopher Canyon Rd	39%	451,000	North
I-15 SB/Gopher Canyon Rd	6%	65,000	North
I-15 NB/Deer Springs Rd	54%	627,000	North
I-15 SB/Deer Springs Rd	41%	470,000	North
SR-67 NB/Bradley Ave	11%	130,000	South
SR-67 SB/Bradley Ave	14%	164,000	South
SR-67 NB/Winter Gardens Blvd	12%	135,000	South
SR—67 SB Winter Gardens Blvd	25%	291,000	South
SR-67 NB/Riverford Rd	31%	352,000	South
SR-67 SB/Riverford Rd	43%	499,000	South
SR-67 NB/Mapleview St	33%	378,000	South
SR-67 SB/Mapleview St	34%	396,000	South
SR-67/Archie Moore Rd (Ramona) (2)	31%	40,000	East
SR-67/Montecito Rd (Ramona) (2)	39%	51,000	East
SR-67/SR-78 (Ramona) (2)	38%	49,000	East
SR-94 EB/Sweetwater Springs Blvd	26%	299,000	South
SR-94 WB/Sweetwater Springs Blvd	29%	335,000	South
TOTAL COST OF GROWTH		**$10,509,000**	

(1) Cost based on $11,500,000 per interchange intersection except as outlined in note (2) below.

(2) Costs for SR-67 at Archie Moore, Montecito, SR 78 in Ramona based on $130,000 perat-grade highway intersection.

(3) South Region totals $7,927,000, North Region total $2,442,000 and the East Region totals $140,000.

REGIONAL AND LOCAL COSTS

Table 4 outlines the planning level costs associated with the TIF program based on the cost assumptions outlined in the Prior Reports and then increased by ENR-CCI. These planning-level costs were based in part on estimates made in SANDAG's Regional Transportation Plan and include all planning, design, right-of-way, environmental, construction and program administration (2%) costs. Based on available information, these planning level costs are sufficient to include intersections along the facilities and at the endpoints of the TIF facilities, including signalization.

TABLE 4
COST OF FACILITIES ATTRIBUTABLE TO FUTURE DEVELOPMENT

Community Planning Area	Estimated Cost (in millions)				
	Regional (1)			Local	TOTAL
	State Route	Prime Arterial	Major Road(2)	Collector & Below	
Alpine		$0.63	$1.13	$11.50	$13.26
Bonsall	77.61		30.67	17.81	126.10
Central Mountain	0.89				0.89
County Islands					0
Crest-Dehesa			24.82	.54	25.36
Desert				8.31	8.31
Fallbrook	27.82		67.91	81.69	177.42
Jamul-Dulzura	90.10			13.56	103.66
Julian					
Lakeside		.87	1.78	51.51	54.16
Mountain Empire	24.62				24.62
North County Metro	35.64	18.96		26.54	81.14
North Mountain	22.74				22.74
Otay		56.64		12.79	69.43
Pala-Pauma	20.97			4.76	25.73
Pendleton-De Luz		5.95		0	5.95
Rainbow				10.38	10.38
Ramona (3)	30.79		33.65	58.80	123.23
San Dieguito		7.28	.28	31.64	39.20
Spring Valley		.01		2.81	2.82
Sweetwater				1.64	1.64
Valle De Oro	.03			8.20	8.24
Valley Center		29.52	1.07	27.95	58.55
Misc. North Region	32.83				32.83
TOTAL COSTS	**$364.04**	**$119.86**	**$161.32**	**$370.44**	**$1015.65**

(1) Refer to Prior Reports regarding Regional facility costs reduction of 7% to account for future traffic volumes not attributable to development within the unincorporated area.

(2) Major and other regionally significant roadways.

The table reflects a reduction to the costs for the East region based upon review of the SANDAG Transportation Model output and roadway needs resulting in a reduction of the estimated cost of Regional lane-miles to $0.89 million for the Central Mountain CPA.

Of the costs identified in the table, it is estimated that approximately $75.0 million is associated with the direct impacts of non-residential properties within the County. As part of the 2008 TIF update, it is recommended that the $75.0 million be credited to the non-residential properties in lieu of those projects requesting reimbursements for direct impact improvements on TIF roadways. This credit is reflected in the non-residential Regional rates.

Based on the continuing efforts to update the County's General Plan, including the Circulation Element, cost savings related to anticipated roadway design standards that eliminate parking on certain roadways have also been quantified. Note that such a change would not affect the capacity of the roadway. The savings is estimated to be $5.05 million in the Regional costs and is reflected in the rates.

FEE METHODOLOGY

The TIF program apportions the costs of the proposed transportation improvements equitably to future development projects based on typical trip generation rates. The program recognizes certain "local" transportation facilities (collectors and minor streets) benefit primarily the community in which they are located, while "regional" facilities (state routes, prime arterials, major roads and interchanges/ramps) benefit both the community and surrounding areas. Therefore, a portion of the total TIF fee was calculated based on the cost of local facilities and apportioned to development only within the boundary of each community (**Figure 1**), while the remainder of the fee was calculated based on the need for regional facilities and apportioned to development within three TIF Regions covering the unincorporated areas of the County. Those three regions are shown in **Figure 2** and are labeled North, South and East.

LOCAL FACILITIES

Each community's TIF rate includes a Local TIF Rate and a Regional TIF Rate. The purpose of the Local TIF Rate is to apportion eligible costs of local TIF facilities (i.e., collectors and other minor roads) to future growth within the community. Total estimated local facility costs, projected local growth within the community, and calculated Local TIF Rates are summarized in **Table 5**.

TABLE 5
LOCAL FACILITY COSTS & TIF RATES

Community Plan Area	Local Cost (1) ($ millions)	Local Growth (trips)	Local TIF Rate (per trip)(2)(3)
Alpine	$11.50	76,176	$151
Bonsall	17.81	33,852	526
Central Mountain	0	7,992	0
County Islands	0	4,884	0
Crest-Dehesa	0.54	6,468	84
Desert	8.31	322,860	26
Fallbrook	81.69	160,992	507
Jamul-Dulzura	13.56	74,676	182
Julian	0	11,220	0
Lakeside (including Pepper Dr-Bostonia)	51.51	153,492	336

Community Plan Area	Local Cost (1) ($ millions)	Local Growth (trips)	Local TIF Rate (per trip)(2)(3)
Mountain Empire	0	112,092	0
North County Metro	26.54	184,992	143
North Mountain	0	18,480	0
Otay	12.79	232,752	55
Pala-Pauma	4.76	48,504	98
Pendleton-De Luz (4)	0	5,100	1
Rainbow	10.38	27,912	372
Ramona	58.80	118,824	495
San Dieguito	31.64	117,120	270
Spring Valley	2.81	50,892	55
Sweetwater	1.64	15,072	109
Valle De Oro	8.20	21,348	384
Valley Center	27.95	130,344	214

(1) Local facility costs eligible for TIF funding.
(2) TIF rates may vary from calculated table values due to rounding and display of significant digits.
(3) Cost reductions are not reflected.
(4) Pendleton-De Luz local cost equals 427 x $7 per the 2005 TIF report.

REGIONAL FACILITIES

The purpose of the Regional TIF Rate is to apportion eligible costs of regional TIF facilities (i.e., freeway interchanges/ramps, state routes, prime arterials, major roads, and other regionally significant roadways) to future growth within the applicable region. Total estimated regional facility costs, projected regional growth, and calculated Regional TIF Rates are summarized in **Tables 6 and 7**. Table 6 displays the portion of the Regional TIF rate apportioned to state routes, primes, and majors and Table 7 displays the portion of the Regional TIF rate apportioned to Freeway interchanges/ramps.

TABLE 6
REGIONAL FACILITY COSTS & TIF RATES (SRS/PRIME ARTERIALS/MAJOR ROADS)

TIF Region (1)	Regional Cost (2) ($ millions)	Regional Growth (trips)	Regional TIF Rate ($/trip) (3)
North	$356.27	713,964	$499
South	$176.14	635,760	$277
East	$112.40	610,788	$184

*(1) Refer to **Figure 2** for location of TIF Regions.*

(2) Portion of Regional facility costs related to SRs/prime arterials and major roads identified for TIF funding.

(3) Cost reduction for lane-miles in East region is reflected. Other cost reductions are not reflected.

TABLE 7
INTERCHANGE/RAMP COSTS & TIF RATES - REGIONAL

TIF Region (1)	Regional Cost (2)	Regional Growth (trips)	Regional TIF Rate ($/trip)
North	$2,442,000	713,964	$ 3.42
South	$7,927,000	635,760	$12.47
East	$ 140,000	610,788	$ 0.23

*(1) Refer to **Figure 2** for location of TIF Regions.*

(2) Interchange/ramp facility costs identified for TIF funding – Includes 10% Local Match.

AN ORDINANCE TO AMEND THE SAN DIEGO COUNTY CODE RELATED TO THE TRANSPORTATION IMPACT FEE

The Board of Supervisors of the County of San Diego ordains as follows:

Section 1. The Board of Supervisors finds and determines that it is necessary to amend Sections 77.204, 77.207, and 77.208, 77.209, 77.210, 77.211, 77.213, 77.214, 77.215 and 77.217; to add Sections 77.208.1 and 77.208.2 and 77.210.1; and to repeal Section 77.212 of the San Diego County Code pertaining to the Transportation Impact Fee. The amendments made by this ordinance are intended to adjust language in the Transportation Impact Fee Ordinance.

Section 2. Section and 77.204 of the San Diego County Code of Regulatory Ordinances is hereby amended to read as follows:

SEC. 77.204. DEFINITIONS.

Whenever the following words are used in this Division, they shall have the meaning ascribed to them in this section.

(a) AGRICULTURE means farming, crop production, or raising of poultry or livestock. Agricultural uses in this ordinance do not include residential facilities.

(b) APPLICANT means developer or person seeking a development permit.

(c) BUILDING PERMIT means a permit required by and issued pursuant to the Uniform Building Code.(d) CONSTRUCTION means design, performance of estimates, environmental assessments and studies, determination of fees, acquisition of right-of-way, administration of construction contracts and actual construction.

(e) COUNTY means the County of San Diego, State of California.

(f) COUNTY HEARING BODY means the County of San Diego, Board of Supervisors, Planning Commission, or any other official, board, or commission designated by the County for decision-making on discretionary actions.

(g) DEVELOPER means the owner or developer of a development seeking a development permit.

(h) DEVELOPMENT PERMIT means any discretionary permit, entitlement, approval for a development project, or any ministerial permit, including building permit, associated with the generation of traffic issued under any ordinance of the County.

(i) DEVELOPMENT PROJECT or DEVELOPMENT means any activity described in Cal. Gov't Code §66000 of the Mitigation Fee Act.

(j) DPW DIRECTOR means the County Director of the Department of Public Works, or his or her designee.

(k) FEE means the fee as set forth in Section 77.208 of this Division.

(l) FREEWAY RAMP means the interchange freeway ramps identified in the "County of San Diego Transportation Impact Fee Report Update" date January 2008.

(m) FURNITURE STORE means a commercial facility for the sale of moveable articles such as tables, chairs, sofas, desks, or cabinets required for use or ornament in a residence, office, or the like.

(n) GENERAL COMMERCIAL includes but is not limited to shopping centers, strip development and commercial clusters, retail sales facilities including grocery stores and department stores, convenience stores, auto sales and repair facilities, hardware and lumber stores, gardening and nursery stores, eating and drinking establishments including fast food restaurants, and any other retail uses other than furniture stores that are not specifically included in other TIF category definitions.

(o) GENERAL INDUSTRIAL means facilities for manufacturing, processing, assembling, distribution services, laboratories for research and development, construction equipment sales and repair, and any industrial use other than warehouse and storage that are not specifically included in other TIF category definitions.

(p) WAREHOUSING AND STORAGE means all types of warehouses or facilities with the primary purpose being to provide storage space.

(q) NON-RESIDENTIAL means development that does not include residential uses.

(r) OFFICE means facilities for administrative or professional services and includes but is not limited to hospitals, medical clinics, insurance sales, banks, savings and loans, and real estate services.

(s) RESIDENTIAL means development composed of single-family dwellings, multi-family attached homes, condominiums and apartments, lodging including hotel rooms and time-share units, mobile homes, facilities for housing agricultural workers, retirement communities, and congregate care facilities for persons unable to care for themselves.

(t) SCHOOLS mean institutions for instruction in a particular skill or field.(u) TIF means Transportation Impact Fee.

(v) TIF AREA means the area lying within the boundaries designated on the TIF Area Map.

(w) TIF AREA MAP means a map showing the boundaries of each TIF Area. The TIF Area Map may be changed or periodically updated by action of the Board of Supervisors. The TIF Area Map is included as Figure 1 of the TIF Reports.

(x) TIF FACILITIES means the transportation facilities, or portions thereof, including intersections and traffic signals, identified in the TIF Reports, or future County approved alternatives that substantially fulfill the transportation needs identified and represented by a listed facility.

(y) TIF REGION means the area lying within the boundaries designated on the TIF Region Map.

(z) TIF REGION MAP means a map showing the boundaries of each TIF Region. The TIF Region Map may be changed or periodically updated by action of the Board of Supervisors. The TIF Region Map is included as Figure 2 of the TIF Reports.

(aa) TIF REPORTS means the "Fallbrook and Ramona Transportation Impact Fee Report" and the "County of San Diego Transportation Impact Fee Report" both dated January 2005 and adopted by the Board of Supervisors on April 13, 2005. Additionally, TIF REPORTS include the "County of San Diego Transportation Impact Fee TIF Program Update" dated January 2008. These reports shall be changed or periodically updated by action of the Board of Supervisors pursuant to Section 77.213 of this Division. The current adopted reports are on file with the Clerk of the Board.

(ab) WINERY means an establishment for producing wine and may include wine tasting rooms.

Section 3. Section 77.207 and 77.208 of the San Diego County Code of Regulatory Ordinances are hereby amended to read as follows:

SEC. 77.207. ESTIMATED COSTS.

The Board of Supervisors also finds that the total estimated costs effective through September 2004 and updated annually each January starting in January 2006, for all TIF Facilities within each said TIF Area are as set forth in the TIF Reports.

SEC. 77.208. FEE ESTABLISHED.

Pursuant to Cal. Gov't Code §§ 66000 et seq. of the Mitigation Fee Act, the fee set forth in said TIF Reports and Alternative Fee Schedules adopted by action of the Board of Supervisors shall be paid by development within the TIF Areas established herein. Instructions for estimating a project's TIF can be found on a link at: http://www.sdcounty.ca.gov/dpw/land/tif.html.

Section 4. Section 77.208.1 and 77.208.2 of the San Diego County Code of Regulatory Ordinances is hereby added to read as follows:

SEC. 77.208.1. RESIDENTIAL TIF FEES

The following are the Residential TIF Fees:

TIF AREA	COST PER SINGLE FAMILY DETACHED (SFD) RESIDENTIAL UNIT			
	Freeway Ramp	Local	Regional	Total per Unit
Alpine	$150	$1,812	$3,294	$5,256
Bonsall	$41	$6,312	$5,942	$12,295
Central Mountain	$3	$0	$2,195	$2,198
County Islands	$150	$0	$3,294	$3,444
Crest-Dehesa	$150	$1,008	$3,294	$4,452
Desert	$3	$312	$2,196	$2,511
Fallbrook	$41	$6,084	$5,942	$12,067
Jamul-Dulzura	$150	$2,184	$3,294	$5,628
Julian	$3	$0	$2,195	$2,198
Lakeside (includes Pepper Dr- Bostonia)	$150	$4,032	$3,294	$7,476
Mountain Empire	$3	$0	$2,195	$2,198
North County Metro	$41	$1,716	$5,942	$7,699
North Mountain	$3	$0	$2,195	$2,198
Otay	$150	$660	$3,294	$4,104
Pala-Pauma	$41	$1,176	$5,942	$7,159
Pendleton-De Luz	$41	$8	$5,942	$5,991
Rainbow	$41	$4,464	$5,942	$10,447
Ramona	$3	$5,940	$2,196	$8,139
San Dieguito	$41	$3,240	$5,942	$9,223
Spring Valley	$150	$660	$3,294	$4,104
Sweetwater	$150	$1,308	$3,294	$4,752
Valle De Oro	$150	$4,608	$3,294	$8,052
Valley Center	$41	$2,568	$5,942	$8,551

To determine the TIF for other residential land uses other than single-family detached (SFD) residential units, the following formula shall be used:

(1) Multi-family attached home, condominium, apartment, lodging including hotel rooms and time-share units, and accessory apartment (granny flat): 67% of SFD fee per unit

(2) Mobile home, agricultural labor residential (non-primary residence), and retirement community: 33% of SFD fee per unit

(3) Congregate Care Facility for persons unable to care for themselves: 20% of SFD fee per unit

Mixed-use development incorporating non-residential and residential uses shall have the non-residential TIF computed as shown in Section 77.208.2, and the total TIF amount shall be the non-residential TIF amount plus the applicable unit costs for any residential units. Adjustment of fees may be made pursuant to Section 77.213 of this Division.

Credits and reductions for residential development:

After calculation of a development's total residential TIF, applicants can subtract amounts including but not limited to the following credits and reductions:

Direct Impact Mitigation:

For residential developments, applicants may receive credit up to their total TIF obligation for direct impact mitigation improvements to a TIF facility. For direct impact improvement costs greater than the total TIF obligation, a reimbursement agreement for cash or credit will be allowed prior to construction of the improvements pursuant to Section 77.210, Section 77.210.5, and Section 77.211. Allowable costs for TIF facility improvements include Design, Civil Engineering, Soils Engineering, Landscape Architecture, Surveying, Bonds, Construction Management and Inspection, Permits, Off-Site Environmental Mitigation and associated costs for monitoring, Acquisition of Off-Site Right-of-Way, Utility Engineering/ Coordination, Environmental Consulting, and other project costs as allowed by the DPW Director in addition to construction costs. On-Site Right-of-Way and On-Site Environmental Mitigation are not eligible for TIF credit. Direct impact mitigation eligible for TIF credit shall include improvements which result in capacity improvements to a TIF facility including but not limited to new road construction, widening of an existing road, construction or improvement of intersections, through lanes and turn lanes, and construction or modification of signalization at intersections.

Alternative TIF Facilities:

For residential developments, applicants that can demonstrate in a traffic study approved by the County that their direct improvements constructed on a non-TIF facility will reduce trips and increase capacity of TIF facilities may receive credit toward their project's TIF obligation. An example of an alternative TIF facility could be a non-TIF road that runs parallel to a TIF facility. If improvements on the parallel non-TIF road can be shown to remove trips from or otherwise enhance operation of the parallel TIF facility, then the non-TIF improvements may be eligible for TIF credit. These improvements on alternative TIF facilities that increase capacity of TIF facilities may be considered for credit in the same way as Direct Impact Mitigation on TIF facilities.

Previously Mitigated Residential Project:

Residential development projects which have mitigated cumulative impacts prior to implementation of the TIF may receive credit toward the TIF. Project applicants requesting adjustment of the adopted fee must have completed a cumulative traffic study and already fully mitigated cumulative impacts. Applicants claiming exemption from the fee must demonstrate to the County that all cumulative impacts were clearly identified, through a cumulative traffic study, and fully mitigated through physical improvements or contribution to future road network improvements in an amount equal to the fee. Projects that analyzed cumulative impacts through a cumulative traffic study and mitigated for cumulative impacts may submit previous traffic studies to the County for consideration of a TIF credit. Amount of credit granted will be proportional to past mitigation compared to mitigation required by TIF. If the project has changed from the time of original approval so that the proposed use is now more impactive to traffic, applicants must pay a portion of the TIF equal to the cumulative impact increase. If the project mitigated to the full extent of the TIF required mitigation, then full credit up to the project's TIF obligation will be granted.

For approved projects with identified cumulative mitigation measures that have not yet been implemented, the County may, at its option and, upon further environmental review if necessary, require either completion of the originally identified mitigation or payment of the TIF.

Opt out:

In lieu of paying the TIF, a developer may choose to prepare cumulative traffic studies in accordance with the new CEQA guidelines then in effect, which no longer recognize de minimus findings, and construct appropriate mitigation. The cumulative traffic analysis must be approved by the DPW Director of or his designee prior to construction of such mitigation.

SEC. 77.208.2. NON-RESIDENTIAL TIF FEES

The following are Non-Residential General Commercial TIF Fees:

General Commercial TIF fee = Cost per 1,000 Square Foot multiplied by the Facility Floor Square Footage divided by 1,000

TIF AREA	COST PER 1,000 SQUARE FOOT FOR GENERAL COMMERCIAL			
	Freeway Ramp	Local	Regional	Total
Alpine	$467	$5,426	$3,342	$9,235
Bonsall	$108	$18,901	$2,946	$21,955
Central Mountain	$9	$0	$5,066	$5,075
County Islands	$467	$0	$5,534	$6,001
Crest-Dehesa	$467	$3,018	$4,312	$7,797
Desert	$9	$934	$5,067	$6,010
Fallbrook	$108	$18,217	$3,234	$21,559
Jamul-Dulzura	$467	$6,539	$2,874	$9,880
Julian	$9	$0	$5,066	$5,075
Lakeside (includes Pepper Dr- Bostonia)	$467	$12,073	$647	$13,187
Mountain Empire	$9	$0	$5,066	$5,075
North County Metro	$108	$5,138	$8,516	$13,762
North Mountain	$9	$0	$5,066	$5,075
Otay	$467	$1,976	$4,743	$7,186
Pala-Pauma	$108	$3,521	$9,163	$12,792
Pendleton-De Luz	$108	$36	$10,564	$10,708
Rainbow	$108	$13,367	$5,174	$18,649
Ramona	$9	$16,026	$0	$16,035
San Dieguito	$108	$9,702	$6,647	$16,457
Spring Valley	$467	$1,976	$4,743	$7,186
Sweetwater	$467	$3,916	$3,916	$8,299

Valle De Oro	$467	$13,762	$0	$14,229
Valley Center	$108	$7,689	$7,474	$15,271

To determine the TIF for other non-residential commercial and industrial land uses other than general commercial, the following formula shall be used:

(1) Furniture Stores: 14% of general commercial fee

(2) General Industrial: 37% of general commercial fee

(3) Storage, Warehousing, Wineries, Non-residential Agricultural: 14% of general commercial fee

(4) Offices: 56% of general commercial fee

(5) Schools and Government/Institutional: 32% of general commercial fee

The non-residential TIF fee shall be computed based on the applicable TIF rate for the primary use of a building or the primary use of each individual storefront for mixed use buildings. Ancillary or support spaces such as management offices in a retail store, storage space in an office building, or offices in an industrial facility will not be separated for computing the TIF. Mixed use buildings with distinct and separate storefronts for multiple businesses will have their TIF computed based on the applicable TIF rate of each distinct and separate storefront. For example, a strip mall with retail stores and office uses such as a bank and a medical office would be charged the general commercial rate for the retail stores and the offices TIF rate for the bank and medical office. Mixed-use development incorporating non-residential and residential uses shall have the residential TIF computed as shown in Section 77.208.1, and the total TIF amount shall be the non-residential TIF amount plus the applicable unit costs for any residential units. Adjustment of fees may be made pursuant to Section 77.213 of this Division.

Credits and reductions for non-residential development.

Direct Improvement Credits for non-residential developments have already been included in the County's overall program for non-residential TIF rates, so direct improvement costs shall not be used as a TIF credit or reduction for non-residential development.

Previously Mitigated Non-Residential Project:

Non-residential development projects which have mitigated cumulative impacts prior to implementation of the TIF may receive credit toward the TIF. Project applicants requesting adjustment of the adopted fee must have completed a cumulative traffic study

and already fully mitigated cumulative impacts. Applicants claiming exemption from the fee must demonstrate to the County that all cumulative impacts were clearly identified, through a cumulative traffic study, and fully mitigated through physical improvements or contribution to future road network improvements in an amount equal to the fee. Projects that analyzed cumulative impacts through a cumulative traffic study and mitigated for cumulative impacts may submit previous traffic studies to the County for consideration of a TIF credit. Amount of credit granted will be proportional to past mitigation compared to mitigation required by TIF. If the project has changed from the time of original approval so that the proposed use is now more impactive to traffic, applicants must pay a portion of the TIF equal to the cumulative impact increase. If the project mitigated to the full extent of the TIF required mitigation, then full credit up to the project's TIF obligation will be granted.

For approved projects with identified cumulative mitigation measures that have not yet been implemented, the County may, at its option and, upon further environmental review if necessary, require either completion of the originally identified mitigation or payment of the TIF.

Opt out:

In lieu of paying the TIF, a developer may choose to prepare cumulative traffic studies in accordance with the new CEQA guidelines in effect, which no longer recognize de minimus findings, and construct appropriate mitigation. The cumulative traffic analysis must be approved by the DPW Director or his designee prior to construction of such mitigation.

Section 5. Section 77.209 and 77.210 of the San Diego County Code of Regulatory Ordinances are hereby amended to read as follows:

SEC. 77.209. PAYMENT OF FEES.

The fees required pursuant to this Division are intended to mitigate cumulative traffic impacts and shall be paid to the County as a condition of approval of a development permit, including a building permit. For development projects that require both discretionary and building permits, the fees shall be paid no later than time of building permit issuance. If the fee is paid prior to the time of building permit issuance and the amount of the fee increases, then the additional fee amount must be paid before the building permit is issued. If the fee is paid prior to time of building permit issuance and the amount of the fee is reduced, then at the time the building permit is issued, a TIF refund will be provided to the applicant. Once a building permit is issued, the amount of the fee is set and will not be adjusted by subsequent increases or decreases to the TIF rates. In the case of discretionary permits that will not involve a building permit but which will generate additional traffic, payment of the fee shall be recommended as a condition of permitting to the decision-making body that would approve such permit.

SEC. 77.210. DEVELOPER CONSTRUCTION OF TRANSPORTATION FACILITIES.

For direct impact mitigation improvement costs on a TIF facility for residential projects, a developer is entitled to compensation and may request a credit for its TIF obligation and a reimbursement for allowable costs greater than the project's TIF obligation. Whenever a developer of a residential or non-residential development project would be required by application of County ordinance or policy, as a condition of approval of a development permit to construct or finance the construction of a portion of a TIF Facility in addition to their direct impact mitigation, the County may impose an additional requirement that the developer install the improvements with supplemental size, length or capacity in order to ensure efficient and timely construction of the transportation facilities network. Similarly, when residential or non-residential development project impacts create an accelerated need for transportation improvements in addition to the project's direct improvements, the County may require accelerated construction of TIF Facilities to assure project conformance with California Environmental Quality Act (CEQA). If such a requirement for supplemental or accelerated facilities is imposed, the developer will be entitled to compensation for eligible construction costs that exceed the total TIF fee required for the developer's project. The developer may request cash reimbursement, or a credit against current or future TIF fees, for work to be done or paid for by the developer, and said request shall be submitted in writing to the DPW Director prior to construction of the improvements. The County will enter into either a cash reimbursement agreement as shown in Section 77.210.5 or a credit reimbursement agreement as shown in Section 77.211 with the developer prior to construction of the improvements.

(a) The reimbursement request shall contain a description of the project with a detailed cost estimate that itemizes those allowable costs of the construction attributable to construction of TIF Facilities and excludes any work attributable to non-TIF facilities. Estimated cost of the facility will be based on the County's current-year Department of Public Works Unit Price List. The estimate is preliminary and the amount of reimbursement or credit against fees is subject to final determination by County's designee. Additional information shall be provided to the County by the developer upon request of the County.

(b) The developer is also required to:

i. Prepare plans and specifications for approval by the County;

ii. Secure and dedicate any right-of-way required for the transportation facility project;

iii. Secure all required permits and environmental clearances necessary for the transportation facility project;

iv. Provide performance bonds for 100 percent of the value of the transportation facility project;

v. Pay all fees and costs for construction of the transportation facility project.

(c) The County will not be responsible for any of the up-front costs of constructing the transportation facility project. The developer shall advance all necessary funds to construct the transportation facility project. Allowable reimbursable costs include cost of Design, Civil Engineering, Soils Engineering, Landscape Architecture, Surveying, Bonds, Construction Management and Inspection, Permits, Off-Site Environmental Mitigation and associated costs for monitoring, Acquisition of Off-Site Right-of-Way, Utility Engineering/ Coordination, Environmental Consulting, and other project costs as allowed by the DPW Director in addition to construction costs. On-Site Right-of-Way and On-Site Environmental Mitigation will not be reimbursed.

(d) The developer shall make all reasonable efforts to secure at least three qualified and responsible bids for work to be done and shall award the construction contract to the lowest qualified bidder. In the event three or more qualified and responsible bids cannot be obtained, then the developer may still award the construction contract if the DPW Director determines the lowest qualified bid is reasonable. Should the construction contract be awarded to a qualified bidder who did not submit the lowest bid for the transportation facility project portion of the contract, the developer will only receive Transportation Impact Fee reimbursement or credit based on the lowest responsible bid for the transportation facility portion of the contract. The developer is allowed to combine the supplemental work with other work being completed for the project in order to obtain the most competitive bids, but costs of the TIF improvement must be segregated within such bids.

(e) All bids must be reviewed by the County prior to contract award. If the lowest bid received exceeds the total estimated cost of the facility, the County may require the developer to obtain a revised bid or, if necessary, submit a redesign of the facility to bring the cost into the estimated range. If the total actual cost of construction is less than the total estimated cost of the facility, then the developer shall be reimbursed for his actual allowable costs.

(f) When all TIF facility improvement work has been completed to the satisfaction of the County, the developer shall submit verification of payments made for the construction of the transportation facility project to the County. The County's designee shall make the final determination relative to expenditures that may be eligible for credit or cash reimbursement.

(g) If the amount of the applicable credit is less than the deferred fee obligation and the TIF Fee is otherwise due and payable, then the developer shall have 30 days to pay the deferred fee. If the deferred fees are not paid within the 30-day period, the County may make a demand against the security and apply the proceeds to the fee obligation.

(h) Prevailing Wage is Applicable. Current applicable prevailing wage is required to be paid for all construction work under either a Cash Reimbursement Agreement or a

Credit Reimbursement Agreement, and bid documents for construction of the Improvements shall include a requirement that such prevailing wages be paid.

Section 6. Section 77.210.1 of the San Diego County Code of Regulatory Ordinances is hereby added to read as follows:

SEC.77.210.1 DEVELOPER REIMBURSEMENT AGREEMENT CASH PAYMENTS

For Developer Reimbursement Agreements for cash reimbursement as described in Sec 77.210, the maximum term of any reimbursement agreement shall be twenty- five (25) years or until reimbursements or credits have been issued in full, whichever occurs first. After twenty-five years, the agreement will expire regardless of whether or not necessary TIF revenues have been collected to reimburse all costs. Cash reimbursements for Developer Reimbursement Agreements will be made from available TIF funds as follows:

(a) Payments shall be made quarterly within 21 days after the end of each calendar quarter from available freeway ramp, local or regional TIF revenue in the applicable TIF Account.

(b) Definitions for Cash Reimbursement Payments.

i. Available TIF Revenue means TIF Fees paid into the applicable local or regional TIF Account during a calendar quarter plus any accumulated TIF Revenue remaining from prior to the quarter.

ii. Developers TIF Reimbursement means payment from the applicable local or regional TIF Account due and payable to Developers pursuant to Reimbursement Agreements for which Reimbursement Amounts have been determined prior to or during the calendar quarter.

iii. County TIF Reimbursement means TIF-eligible project costs during a calendar quarter for TIF Facility projects being accomplished by the County.

iv. Quarterly TIF Payments means Developer TIF Reimbursements and County TIF Reimbursements that become due for a calendar quarter (January 1 to March 31, etc).

(c) Proportionality of Cash Reimbursements to Developers and to the County.

i. If eligible Developers or County TIF Reimbursements are both less than 50% of the Available TIF Revenue, then Developers and County shall each be fully reimbursed.

ii. If both Developers and County have eligible TIF reimbursements that exceed 50% of a quarter's Available TIF Revenue, then 50% of the revenue shall be allocated to Developers and 50% to County.

iii. If either Developers or County have eligible TIF Reimbursements that are less than 50% of the Available TIF Revenue and the other has eligible TIF Reimbursements that exceed 50% of the Quarter's Available TIF Revenue, then the one having less than 50% shall receive full reimbursement and the other shall receive up to the amount due from all remaining Available TIF Revenue regardless of whether it exceeds 50%.

(d) Proportionality of Quarterly Reimbursements of available TIF Revenue among multiple Developers

i. For determining payments, 50% of TIF Revenue available for reimbursements to Developers shall be allocated based on the Initial Amount Owed to each Developer and 50% shall be allocated based on Initial Ratio of Actual Cost of Improvements to TIF Obligation.

ii. Initial Amount Owed. Allocation to each Developer for whom payment are due each quarter shall be abased on the ratio for the Developer's initial Reimbursement Amount to the total of all Developers' initial Reimbursement Amounts for whom payments are due for the quarter. As an example, if there are three developers eligible for TIF Reimbursements from a TIF Account for a particular quarter, and the initial Reimbursement Amounts for Developers A, B, and C are $5,000,000, $15,000,000, and $30,000,000 respectively, then 50% of available TIF revenue to be allocated to Developers shall be proportioned as follows:

Developer A receives $5 million/$50 million = 10%

Developer B receives $15 million/$50 million = 30%

Developer C receives $30 million/$50 million = 60%

iii. Initial Ratio of Actual Cost to Improvements to TIF Obligation . Allocation to each Developer for whom payments are due each quarter shall be based on the ratio of the Developer's Actual Cost of Improvements to that Developer's TIF Obligation. For example, if there are three developers eligible for TIF Reimbursements from a TIF Account for a particular quarter, and the initial ratio of Actual Cost of Improvements to TIF Obligation are as follows:

Developer A	Initial Actual Cost of Improvements = $5 million
	TIF Obligation = $2.5 million
	Ratio = $5 million/$2.5 million = 2
Developer B	Initial Actual Cost of Improvements = $55 million
	TIF Obligation = $1 million

Ratio = $15 million/$1 million = 15

Developer C Initial Actual Cost of Improvements = $30 million

TIF Obligation = $10 million

Ratio = $30 million/$10 million = 3

Then the remaining 50% of available TIF revenue to be allocated to developers shall be proportioned as follows:

Developer A = 2 / (2 + 15 + 3) =10%

Developer B = 15 / (2 + 15 + 3) = 75%

Developer C = 3 / (2 + 15 + 3) = 15%

(e) Adjustments to Unpaid Reimbursement Balance. Upon each anniversary of the date that the first reimbursement payment became due under a Reimbursement Agreement, the unpaid balance shall be adjusted to reflect the lesser of an annual interest rate of 2% or increases, if any, in the Los Angeles Construction cost Index (CCI), referenced in Section 77.213, but annual interest shall be no less than 1%. The balance adjustment shall commence on the date the Reimbursement Amount became due and end on the date on which the final Incremental Reimbursement Payment is received by the Developer. All reimbursement payments will be provided to the Developer at the address provided in the Reimbursement Agreement, and the address may be changed in writing by the Developer.

(f) Prevailing Wage is Applicable. Current applicable prevailing wage is required to be paid for all construction work under the Agreement, and bid documents for construction of the Improvements shall include a requirement that such prevailing wages be paid.

Section 7. Section 77.211 of the San Diego County Code of Regulatory Ordinances is hereby amended to read as follows:

SEC. 77.211. DEVELOPER TIF CONSTRUCTION CREDITS.

When a transportation facility, or portion thereof, as described in the TIF Reports, or when an alternative TIF Facility as described in Section 77.208.1 is constructed by the developer through a written agreement with the County as described in Section 77.210, the County shall grant either cash reimbursements as shown in Section 77.210.5 or construction credits. Construction credits will be limited to the total actual allowable costs. When a developer chooses to receive construction credits, the developer must request credit reimbursement from the County to initiate this process, and the terms of construction credit issuance will be described in a written credit reimbursement

agreement between the developer and the County. The County will incrementally apply credit which the developer has accrued against the developer's TIF obligations in lieu of collecting the required Transportation Impact Fees as each building permit is issued based upon the fee schedule in effect at the time of the building permit issuance. Construction credits are transferable, at the holder's sole and absolute discretion, but may only be applied within the same TIF Region in which the facilities were constructed. TIF Facility credit will not be given for non-TIF facilities, unless such facilities are approved by County as an alternative to a listed TIF facility.

Section 8. Section 77.212 of the San Diego County Code of Regulatory Ordinances is hereby repealed:

Section 9. Section 77.213, 77.714, and 77.215 of the San Diego County Code of Regulatory Ordinances are hereby amended to read as follows:

SEC. 77.213. ADJUSTMENT OF FEES.

The fees established by Section 77.208.1 and Section 77.208.2 hereof have been established based in part on estimated costs to construct TIF Facilities as of September 2004 and updated annually starting in January 2006. The amount of the fee shall be adjusted annually on January 1st of each year. Said adjustment shall be based on the following criteria:

(a) The one-year change (from September to September) in the Los Angeles Construction Cost Index as determined by *Engineering News Record* published by McGraw Hill Publishing Company, or any successor thereof, or an increase of 2.0%, whichever is more. The Board of Supervisors shall review the fee annually as required by Government Code Section 66006 and the adjustments shall not exceed the percentage increase set forth in the Los Angeles Construction Cost Index or an increase of 2.0%, whichever is more. Adjustments to the fees based upon the Construction Cost Index shall be automatic and shall not require further action of the Board of Supervisors.

(b) Changes in the type, size, location or cost of the transportation facilities (if any) to be financed by the fee, changes in land use designations in the County's general plan, and upon other sound engineering, financing and planning information. Adjustments to the fees resulting from the above reviews may be made by resolution amending the fee schedules contained in the TIF Reports and subject to the notice and public meeting requirements of Government Code Section 66016.

The Board of Supervisors may reduce the fee by up to 50% for a specific project if it determines there are public financial benefits that warrant such a reduction, and funding to replace the excused fee amounts is committed as part of such action. The Board of Supervisors may create a zone of "reduced impact fees" to encourage growth within that area by supplementing public funds to replace fees in the same amount that would have been collected as such growth occurred.

SEC. 77.214. USE OF FEES.

Fees collected hereunder in satisfaction of the local portion of the total TIF rate, as set forth in Section 77.208.1 and Section 77.208.2 of this Division, shall be segregated into a TIF Facilities fund with an interest-bearing account established for each TIF Area, and the funds therein and interest accruing thereto shall be expended solely for the construction or reimbursement for construction of TIF Facilities within the TIF Area from which the fees comprising the fund were collected. Fees collected hereunder in satisfaction of the regional portion of the total TIF rate, as set forth in Section 77.208.1 and Section 77.208.2 of this Division, shall be segregated into a TIF Facilities fund with an account established for each TIF Region, and the funds therein and interest accruing thereto shall be expended solely for the construction or reimbursement for construction of TIF Facilities within the TIF Region from which the fees comprising the fund were collected. These fees may also be used to reimburse the County for TIF Facilities constructed by the County with funds from other sources. Fees collected hereunder in satisfaction of the freeway/interchange ramps portion of the total TIF rate, as set forth in Section 77.208.1 and Section 77.208.2 of this Division, shall be segregated into a TIF Facilities fund with an account established for each TIF Freeway/Interchange Ramp Region, and the funds therein and interest accruing thereto shall be expended solely for the construction or reimbursement for construction of TIF Interchange Ramp Facilities within the TIF Region from which the fees comprising the fund were collected.

TIF Facilities and funds shall be identified in a Department of Public Works Detailed Work Program, which includes capital improvements and other transportation related expenditures. The TIF facilities within the Detailed Work Program (DWP-TIF) will be presented for Board approval as part of the annual budget approval process. TIF Facilities funds within the DWP-TIF will not be co-mingled with other project funds to ensure that revenues and expenditures are solely and exclusively used for TIF Facility construction. However, these funds may be augmented by other sources, if available, in order to complete TIF Facility projects.

Expenditure for interim improvements that provide incremental progress and measurable benefits, such as increased capacity or traffic flow, will be allowed. These interim improvements will be consistent with the long-term objectives of full TIF facility construction as determined by the DPW Director. When recommended by the DPW Director, interim improvements will be identified in the DWP- TIF and expenditures from the TIF Facilities funds will be authorized commensurate with DWP-TIF approval. In selecting which specific road improvements shall be recommended, priority shall be given to those roads that serve projects that have paid impact fees.

SEC. 77.215. APPLICABILITY.

This Division shall apply to all development permits, including building permits, associated with the generation of traffic through new construction or expansion of an existing facility that add square footage space to a facility, as determined by the County.

However, examples of building permits to which this Division shall not apply, include but are not limited to:

(a) Alterations, improvements, or additions to an existing single family dwelling, or rebuilding of a destroyed single family dwelling that does not change its classification of occupancy.

(b) Apartment to condominium conversions.

(c) Interim or Temporary Use Permits of three years or less complying with requirements of Section 77.217.

(d) Permitted Home businesses such as child day care in a residential unit and other business uses allowed within a residence.

(e) Tenant Improvements to existing non-residential facilities including changes of occupancy or changes in use for an existing facility.

(f) Minor expansions to existing non-residential facilities. Minor expansions for purposes of this ordinance refer to expansions that increase the total floor space of a facility by no more than 1,000 square feet. Expansions of greater than 1,000 square feet would require payment of TIF for all additional floor space beyond the initial 1,000 square foot expansion. For example, an existing facility that expands from 10,000 square feet to 20,000 square feet would have a TIF obligation based on 9,000 square feet. To prohibit incremental expansions to avoid payment of the TIF, any prior expansions over the preceding five years will be considered part of the current expansion.

(g) Rebuilding of a destroyed non-residential facility that does not increase floor space greater than 1,000 square feet. Expansions of greater than 1,000 square feet would require payment of TIF for all additional floor space beyond the initial 1,000 square foot expansion.

(h) Uncovered outdoor areas for tables or seating for a café or restaurant that do not require a building permit.

(i) Accessory buildings such as non-commercial garages, barns, sea containers, workshops at residences, and non-residential agricultural buildings (agricultural labor dwellings are not exempt).

(j) Signs, water tanks, propane tanks, other liquid tanks, fuel pumps including gasoline station pumps, wells, or similar structures.

The Director of Public Works is authorized to prepare and maintain a list of all permits types to which the fee will apply.

This Division shall not exempt any new development except as required by state or federal law. In cases where a development is specifically exempt by law from this Division, but said development has transportation impacts required to be mitigated by CEQA, the County can accept TIF payment for mitigation purposes.

The requirement of this chapter shall not apply to projects for which fees for an unexpired building plan check were paid on or before March 29, 2005 regardless of whether they obtain their building permit prior to the effective date of this ordinance.

Section 10. Section 77.217 of the San Diego County Code of Regulatory Ordinances is hereby amended to read as follows:

SEC. 77.217. WAIVER.

A development which is designed and intended as a temporary use (3 years or less) and which is conducted in facilities which are, by their nature, short- term interim facilities such as a portable or modular building (including mobile homes, trailers, etc.) may apply to the DPW Director for a TIF fee waiver. The DPW Director shall have the authority to grant such waivers.

Section 11. Effective Date. This Ordinance shall take effect and be in force sixty (60) days after the date of its passage, and before the expiration of fifteen (15) days after its passage, a summary shall be published once with the names of the members voting for and against the same in _____, a newspaper of general circulation published in the County of San Diego.

APPENDIX E

- Freeway Segment Analysis Worksheets

Table E-1
Existing Freeway Segment Volumes and Level of Service Summary

Route	Limits	# Lanes	Capacity	ADT	Peak Hour %	Direction Split	Truck Factor	v/c Ratio	LOS
Interstate 15	East Mission Rd to SR-76	4	8,800	133,125	7.81%	60.0%	10.2%	0.782	C
	SR-76 TO Old Hwy 395	4	8,800	127,925	7.72%	60.0%	10.2%	0.743	C

Lanes - Number of lanes in one direction: HOV-High Occupancy Lanes

Capacity - Capacity in one direction

ADT - Average Daily Traffic

Peak Hour % - Percentage of average daily traffic occurring during the peak hour

Direction Split - Percentage of peak hour traffic traveling in peak direction.

Truck Factor - Truck/terrain factor to represent influence of heavy vehicles and/or grades.

Peak Hour Volume - Peak hour traffic in peak direction of travel/ For facilities with HOV lanes, ten percent is assumed to use HOV lanes.

v/c Ratio - Volume to Capacity Ratio

LOS - Caltrans District 11 procedure was used to estimate the freeway level of service. Designations vary from A to F, with four level of LOS F from F(0) to F(3).

Table E-2
Existing + Project Freeway Segment Volumes and Level of Service Summary

Route	Limits	# Lanes	Capacity	ADT	Peak Hour %	Direction Split	Truck Factor	v/c Ratio	LOS
Interstate 15	East Mission Rd to SR-76	4	8,800	133,136	7.81%	60.0%	10.2%	0.782	C
	SR-76 TO Old Hwy 395	4	8,800	127,925	7.72%	60.0%	10.2%	0.743	C

Lanes - Number of lanes in one direction: HOV-High Occupancy Lanes

Capacity - Capacity in one direction

ADT - Average Daily Traffic

Peak Hour % - Percentage of average daily traffic occurring during the peak hour

Direction Split - Percentage of peak hour traffic traveling in peak direction.

Truck Factor - Truck/terrain factor to represent influence of heavy vehicles and/or grades.

Peak Hour Volume - Peak hour traffic in peak direction of travel/ For facilities with HOV lanes, ten percent is assumed to use HOV lanes.

v/c Ratio - Volume to Capacity Ratio

LOS - Caltrans District 11 procedure was used to estimate the freeway level of service. Designations vary from A to F, with four level of LOS F from F(0) to F(3).

Table E-3
Cumulative w/o Project Freeway Segment Volumes and Level of Service Summary

Route	Limits	# Lanes	Capacity	ADT	Peak Hour %	Direction Split	Truck Factor	v/c Ratio	LOS
Interstate 15	East Mission Rd to SR-76	4	8,800	145,848	7.81%	60.0%	10.2%	0.856	D
	SR-76 TO Old Hwy 395	4	8,800	169,368	7.72%	60.0%	10.2%	**0.983**	**E**

Lanes - Number of lanes in one direction: HOV-High Occupancy Lanes

Capacity - Capacity in one direction

ADT - Average Daily Traffic

Peak Hour % - Percentage of average daily traffic occurring during the peak hour

Direction Split - Percentage of peak hour traffic traveling in peak direction.

Truck Factor - Truck/terrain factor to represent influence of heavy vehicles and/or grades.

Peak Hour Volume - Peak hour traffic in peak direction of travel/ For facilities with HOV lanes, ten percent is assumed to use HOV lanes.

v/c Ratio - Volume to Capacity Ratio

LOS - Caltrans District 11 procedure was used to estimate the freeway level of service. Designations vary from A to F, with four level of LOS F from F(0) to F(3).

Table E-4
Cumulative + Project Freeway Segment Volumes and Level of Service Summary

Route	Limits	# Lanes	Capacity	ADT	Peak Hour %	Direction Split	Truck Factor	v/c Ratio	LOS
Interstate 15	East Mission Rd to SR-76	4	8,800	145,859	7.81%	60.0%	10.2%	0.856	D
	SR-76 TO Old Hwy 395	4	8,800	169,368	7.72%	60.0%	10.2%	**0.983**	**E**

Lanes - Number of lanes in one direction: HOV-High Occupancy Lanes

Capacity - Capacity in one direction

ADT - Average Daily Traffic

Peak Hour % - Percentage of average daily traffic occurring during the peak hour

Direction Split - Percentage of peak hour traffic traveling in peak direction.

Truck Factor - Truck/terrain factor to represent influence of heavy vehicles and/or grades.

Peak Hour Volume - Peak hour traffic in peak direction of travel/ For facilities with HOV lanes, ten percent is assumed to use HOV lanes.

v/c Ratio - Volume to Capacity Ratio

LOS - Caltrans District 11 procedure was used to estimate the freeway level of service. Designations vary from A to F, with four level of LOS F from F(0) to F(3).

APPENDIX F

- List of Pending Projects
- Trip Generation of Pending Projects not Included in GP2020
- Excerpts from SR-76 East Corridor Study, March 2007

List of Pending Projects

DPW ATTACHMENT ~~BX~~
TM 5385 (5-15-07)
Partial List of Projects Submitted/not yet built out

TM 5014-1, north end of N. Berry Road/east of Lilac Road, VC; 109-acre / 22 s-f lots
TM 5047, Cobb Lane/Valley Center Rd, Valley Center; 327 ac / 137 s-f lots
TM 5087, Lilac Road/Betsworth Road, VC; 118.2 ac/ 248 s-f lots + 48 townhomes.
TM 5173 Cole Grade Road/Cool Valley Rd, VC; 435.39 acres / 169 s-f lots
TM 5177 Betsworth / Frace Roads, Valley Center; 226 acres / 56 s-f lots
TM 5187 Old Hwy 395/Pala Mesa Road, Fallbrook; 84.6 ac / 126 s-f lots
TM 5195 Stage Coach Lane / GumTree Lane, Fallbrook; 70 ac / 101 s-f lots
TM 5212 Wizard Way/Camino De Oro, VC; 28.7 ac / 5 s-f lots
TM 5222 Cool Valley Road / Saddleback Road, VC; 30 ac / 10 s-f lots
TM 5223 Shadow Run Ranch, SR 76/Adams Drive, Pala; 248 acres / 44 s-f lots
TM 5227 Red Mountain/E. Mission Road, Fallbrook, 4 s-f lots
TM 5231, Canonita Drive/Old Hwy 395, Fallbrook; 30.48 acres / 39 Condo units
TM 5243 Fallbrook Street/Beaver Creek Lane, Fallbrook ; 12.8 acres / 8 s-f Lots
TM 5263, Pauma Heights Rd/La Cuesta De Pauma, Valley Center; 273 acres, 50 s-f lots
TM 5264, Pico Road, north of Camino Del Rey, Bonsall; 112 ac / 9 s-f lots
TM 5268, Gum Tree Lane/Stage Coach Lane/E. Mission Rd, Fallbrook, the Arbors; 12.9 acres / 17 s-f Lots
TM 5272, Wilhite Lane, south of Miller Road, VC; 27 ac / 11 s-f lots
TM 5273; Camino de Oro/Mac Tan Road, VC; 15.8 ac / 7 s-f lots
TM 5276, Aqueduct Road /Via Urner, Bonsall; 12.8 acres / 8 s-f Lots
TM 5301, Valley Center Shopping Center & condos; Valley Center Road/Cole Grade Road; 73 ac / 71 unit condo + 20 ac comm./retail
TM 5338 Campus Park; SR 76/Pankey Road; 501 acres / 529 s-fr lots+ 472 mf du, town center, office & commercial
TM 5346 Old hwy 395 Old Hwy 395/Via Urner, Bonsall; 38.4 ac / 9 s-f lots
TM 5354, The Meadowood; SR 76/Pankey Road; 390 acres /394 s-f lots+ 756 mf du, + school site
TM 5359, Keyes Creek Estates; West Lilac Road east of Via Piedra, VC; 43 acres / 8 s-f lots
TM 5364, Green Canyon Rd s-o Calmin Dr, 11.2 acres / 10 s-f lots
TM 5385; GPA 04-08; SP 04-007; REZ 04-016, Lilac Ranch
TM 5387, MUP 04-032; Las Casitas, Camino Del Cielo / Bonsall; 84.6 ac / 130 s-f lots
TM 5410 marquardt ranch; W. Lilac Road/Mesa Lilac Road, Bonsall; 44 acres / 9 s-f res lots
TM 5424 Campus Park West; SR 76 / Pankey; 118.5 ac / 109 s-f lots+457 m-f condos, 22 ac com'l+ 10 ac office or m-f R
TM 5427 Camino Del Rey / Camino Del Cielo, Bonsall; 53 ac / 76 condo units
TM 5446, Oak Glen Rd/W. Oak Glen Rd, Valley Center; 19.7 acres / 9 s-f lots

TM 5449, Fallbrook Oaks; Reche Road/Ranger Road; 26 ac / 19 s-f lots
TM 5451 Sierra Verde Road, east of Paradise Mountain Road; 250 acres / 23 s-f lots
TM 5458, Valley Center Rd / Molly Anne Ct, VC; 17.4 ac / 8 s-f lots
TM 5469 Ridge Creek-east of Live Oak Park Road/Ridge Dr: Ridge Creek Rd; 30.4 acres / 14 s-f Lots
TM 5478 Duffwood Lane/Fruitvale Rd, Valley Center; 23.5 acres / 10 s-f R
TM 5492 Aquaduct Rd/Camino Del Rey, Bonsall; 206 ac / 22 s-f lots
TM 5494 Double K - Sierra Rojo, Valley Center; 29.5 acres / 6 s-f lots
TM 5498 Old River Road/Camino Del Rey, Bonsall; 116 s-f lots
TM 5499 SR 76 east of Cole Grade Road, Pauma; 48.3 acres / 31 s-f lots
TM 5507 Orchard Vista Road, south of Mirar De Valle & west of Valley Center Road; 26 ac / 11 s-f lots
TM 5514 , Circle R Drive / Old Castle Road; 3.7ac / 63 senior condos

Note:
s-f = single family
m-f = multi-family residential

Trip Generation of Pending Projects not included in GP2020

County Projects Requiring General Plan Amendments, or were not included in County GP2020

Source	County Processing #	Project Name	Land Use	# of Units	Unit	Trip Generation Rates: Daily	AM Peak Hour: Total (% of Daily)	AM Peak Hour: % In	AM Peak Hour: % Out	PM Peak Hour: Total (% of Daily)	PM Peak Hour: % In	PM Peak Hour: % Out	Trip Generation: Daily	AM Peak Hour: Total	AM Peak Hour: In	AM Peak Hour: Out	PM Peak Hour: Total	PM Peak Hour: In	PM Peak Hour: Out
Urban Systems Associats, Inc. April 18, 2007 TIA	**GPA 04-02, SPA 04-01, TM 5354**	**Meadowood**	Single-Family Residential	367	DU	10	8%	30%	70%	10%	70%	30%	3,670	294	88	206	367	257	110
			Multi-Family Residential	500	DU	8	8%	20%	80%	10%	70%	30%	4,000	320	64	256	400	280	120
			Neighborhood Park	8.5	AC	5	4%	50%	50%	8%	50%	50%	43	2	1	1	3	2	1
			Elementary Park	12.4	AC	90	32%	60%	40%	9%	40%	60%	1,116	357	214	143	100	40	60
												Total-Meadowood	**8,829**	**973**	**367**	**606**	**870**	**579**	**291**
Est. Trip Gen. From Project Facility Availability Form	**TM 5508**	**Warner Ranch**	Estate Residential (513.61 Acres)	905	DU	12	8%	30%	70%	10%	70%	30%	**10,860**	**869**	**261**	**608**	**1,086**	**760**	**326**
Est. Trip Gen. From USA's Report on Meadowood	**GPA 05-003, SPA 05-001, TM 5424, REZ 05-005, S 05-014**	**Campus Park West (Pappas)**	Single-Family Residential	109	DU	10	8%	30%	70%	10%	70%	30%	1,090	87	26	61	109	76	33
			Multi-Family Residential	457	DU	8	8%	20%	80%	10%	70%	30%	3,656	292	58	234	366	256	110
			General Commercial (15 AC Community Shopping)	150	ksf	80	4%	60%	40%	10%	50%	50%	12,000	480	288	192	1,200	600	600
			Highway Commercial (Including 110 Rm Hotel & Gas Station)	10	AC	1200	4%	60%	40%	10%	50%	50%	12,000	480	288	192	1,200	600	600
			Office	8	AC	300	14%	90%	10%	13%	20%	80%	2,400	336	302	34	312	62	250
												Total-Campus Park West (Pappas)	**31,146**	**1,675**	**962**	**713**	**3,187**	**1,594**	**1,593**
Bill got Numbers from review of study at County	**GPA 03-04, SP 03-04, R03-014, TM 5338**	**Campus Park (Passerelle)**	Single-Family Residential	529	DU	10	8%	30%	70%	10%	70%	30%	5,290	423	127	296	529	370	159
			Multi-Family Residential (Condominium)	276	DU	8	8%	20%	80%	10%	70%	30%	2,208	177	35	142	221	155	66
			Multi-Family Residential (Apartment)	191	DU	6	8%	20%	80%	9%	70%	30%	1,146	92	18	74	103	72	31
			Town Center	72	ksf	120	4%	60%	40%	10%	50%	50%	8,640	346	208	138	864	432	432
			Office/Professional	157	ksf	16	12%	90%	10%	12%	20%	80%	2,512	301	271	30	301	60	241
			Highway Commercial	140	ksf	120	4%	60%	40%	10%	50%	50%	16,800	672	403	269	1,680	840	840
			Park	10.6	AC	50	13%	50%	50%	9%	50%	50%	530	69	35	34	48	24	24
												Total-Campus Park (Passerelle)	**37,126**	**2,080**	**1,097**	**983**	**3,746**	**1,953**	**1,793**
RBF July 2007, EIR Text		**Palomar Community College**	Community College (2 Year)	2833	Students	1.2	12%	80%	20%	9%	60%	40%	**3,400**	**408**	**326**	**82**	**306**	**184**	**122**
Per Nick Ortiz at County		**Pala Casino**	Casino Expansion				2%	90%	10%	13%	56%	44%	**5,000**	**100**	**90**	**10**	**650**	**364**	**286**
Per Nick Ortiz at County		**Pauma Casino**	Casino & Hotel Expansion				2%	90%	10%	13%	56%	44%	**6,500**	**130**	**117**	**13**	**845**	**473**	**372**
APN 130-100-21 through 2		**Adjacent 48 Acre Parcel**	48 Acres Residential	48	DU	12	8%	30%	70%	10%	70%	30%	**576**	**46**	**14**	**32**	**58**	**41**	**17**

MEADOWOOD
GPA 04-02, SPA 04-01, R04-004,
VTM 5354RPL^2, S04-005, S04-006,
S04-007, AND ER NO. 04-02-004

TRAFFIC IMPACT ANALYSIS

For

MEADOWOOD

Prepared for

THE COUNTY OF SAN DIEGO

and

PARDEE HOMES

Submittal: April 18, 2007

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TRAFFIC PLANNING & ENGINEERING, MARKETING & PROJECT SUPPORT
CONSULTANTS TO INDUSTRY AND GOVERNMENT
4540 Kearny Villa Road, Suite 106
San Diego, CA 92123-1573
(858) 560-4911

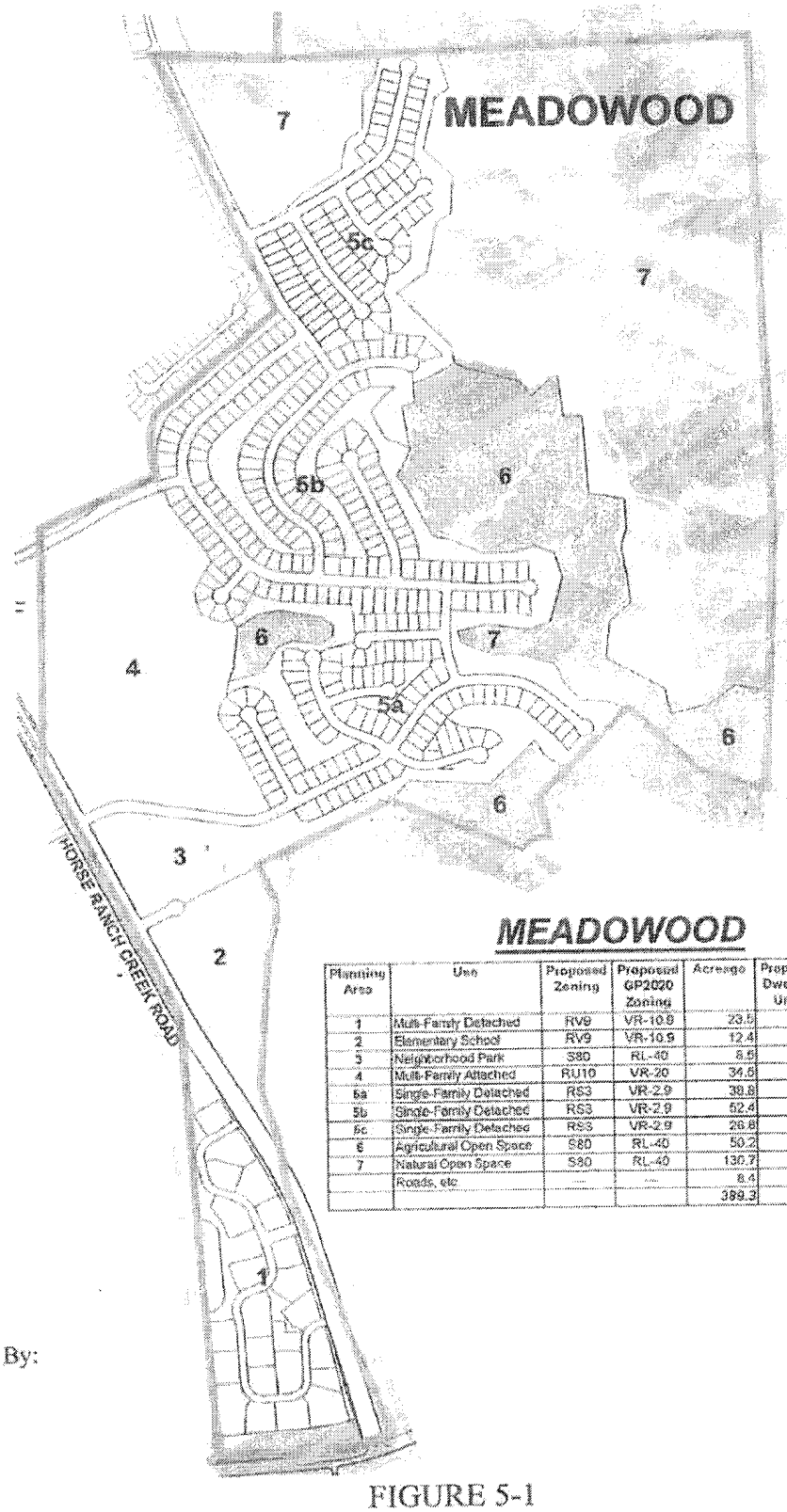
5.0 THE PROJECT TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

This section of the report includes the Meadowood project trip generation, distribution, and assignment to adjacent roadways and intersections. Project only traffic is then used in subsequent chapters for analysis and determination of project specific impacts.

5.1 TRIP GENERATION

Figure 5-1 shows the project site plan as proposed. As shown, the project is primarily residential in nature. There are 367 single-family homes proposed in the north easterly portion of the project. The multi-family lower density detached units (174) are located just east of Horse Ranch Creek Road and the higher density attached multi-family units (326) are located towards the south end of the project and west of Horse Ranch Creek Road. An elementary school is located on Horse Ranch Creek Road between the low and higher density multi-family units. School access is via a proposed signalized access at the north end of the school site. The neighborhood park is located on Horse Ranch Creek Road towards the northerly end of the project.

Table 5-1 shows the expected trip generation for the project. SANDAG trip generation rates were used for the proposed land uses. As shown in the table, a total of 3,670 daily trips are expected to be generated by the single-family units. The multi-family units are expected to generate a combined total of 4,000 daily trips and the elementary school, when built, will generate about 1,116 daily trips. It should be noted that there is an alternative residential use identified for the school site. However, we used the most



MEADOWOOD

Planning Area	Use	Proposed Zoning	Proposed GP2020 Zoning	Acreage	Proposed Dwelling Units	Density
1	Multi-Family Detached	RV9	VR-10.9	23.5	174	7.4
2	Elementary School	RV9	VR-10.9	12.4	(33)	2.6
3	Neighborhood Park	S80	RL-40	8.5	---	---
4	Multi-Family Attached	RU10	VR-20	34.8	326	9.6
5a	Single-Family Detached	RS3	VR-2.9	38.8	119	2.8
5b	Single-Family Detached	RS3	VR-2.9	52.4	176	3.3
5c	Single-Family Detached	RS3	VR-2.9	26.8	81	3.0
6	Agricultural Open Space	S80	RL-40	50.2	---	---
7	Natural Open Space	S80	RL-40	130.7	---	---
	Roads, etc	---	---	8.4	---	---
				389.3	867	2.5

SOURCE

Site Plan Provided By:
Latitude 33

FIGURE 5-1

Project Site Plan

0303-Graphics_H.dwg

TABLE 5-1

Meadowood Trip Generation

Use	Intensity	Rate	ADT	AM						PM					
				Peak %	Vol	In % : Out%		In	Out	Peak %	Vol.	In % : Out%		In	Out
Single- Family Residential	367	10 /DU	3,670	8%	294	30% : 70%		88	206	10%	367	70% : 30%		257	110
Multi-Family Residential	500	8 /DU	4,000	8%	320	20% : 80%		64	256	10%	400	70% : 30%		280	120
Neighborhood Park	8.5	5 /AC	43	4%	2	50% : 50%		1	1	8%	3	50% : 50%		2	1
Elementary School	12.4	90 /AC	1,116	32%	357	60% : 40%		214	143	9%	100	40% : 60%		40	60
TOTAL			8,829		973			367	606		870			579	291

Source:

Rates taken from Sandag "Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region" Apr-02

Note:
DU= Dwelling Unit
AC= Acre

conservative acreage generation rate for the school and for this analysis. The neighborhood park is expected to generate about 43 trips daily.

On a peak hour basis during the morning peak, the total project including the school will generate 367 inbound and 606 outbound trips. During the PM peak, it is expected that the project will generate 579 inbound trips and 291 outbound trips.

Appendix D contains the SANDAG Trip Generation Rates used for this analysis and noted in **Table 5-1**.

5.2 PROJECT ONLY TRAFFIC DISTRIBUTION AND ASSIGNMENT

Figure 5-2 shows the expected project traffic distribution and assignment to the road system expected to be in place in Year 2030 for the proposed project. Other development is also assumed in the distribution and assignment of the project only trips shown on this figure. To determine the project impacts, an updated County GP2020/Series 10 SANDAG Regional Traffic Model for the Year 2030 was used. The traffic model and assumptions for Approved/Pending Projects are discussed in the cumulative impacts section of this report. **Figure 5-3** shows the project only average daily traffic that was used for analysis in subsequent sections of this report. **Figure 5-4** shows the project only peak hour volumes used for intersection analysis in subsequent sections of this report.

Included in **Appendix B** is the County Circulation Element for the project area. This figure represents the County 2020 preferred network which was approved in concept by the Board of Supervisors on August 2, 2006.

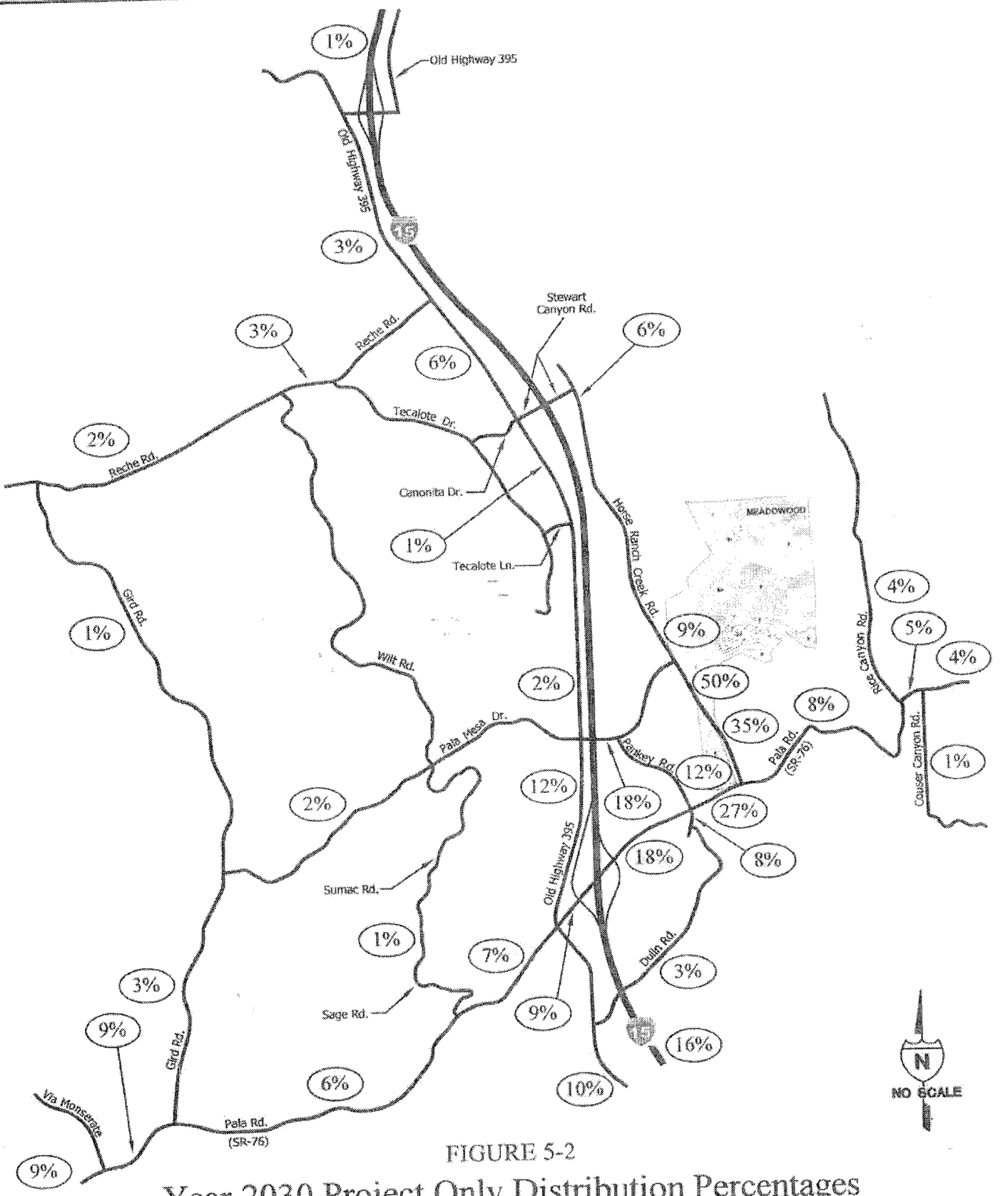


FIGURE 5-2

Year 2030 Project Only Distribution Percentages

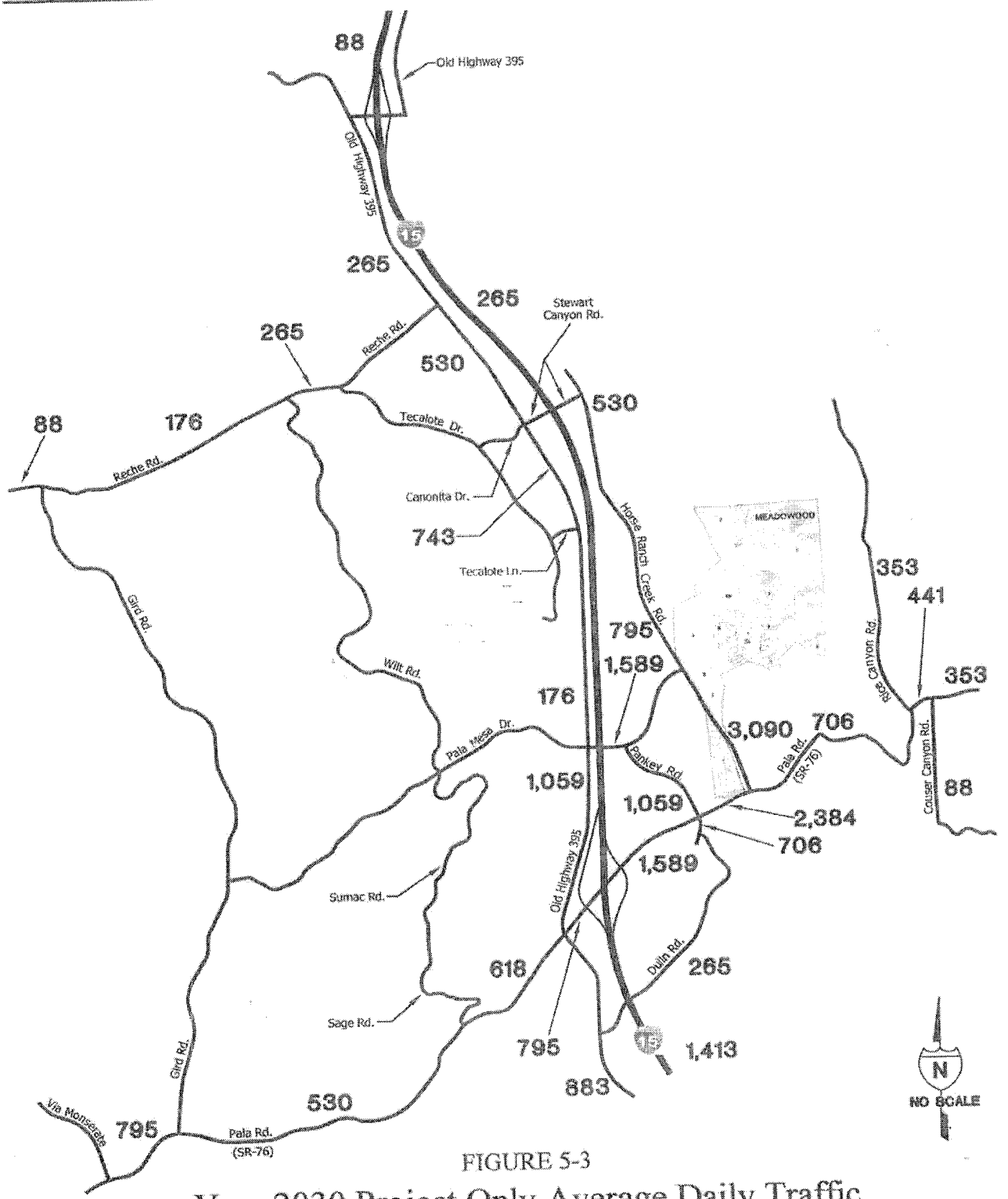


FIGURE 5-3

Year 2030 Project Only Average Daily Traffic

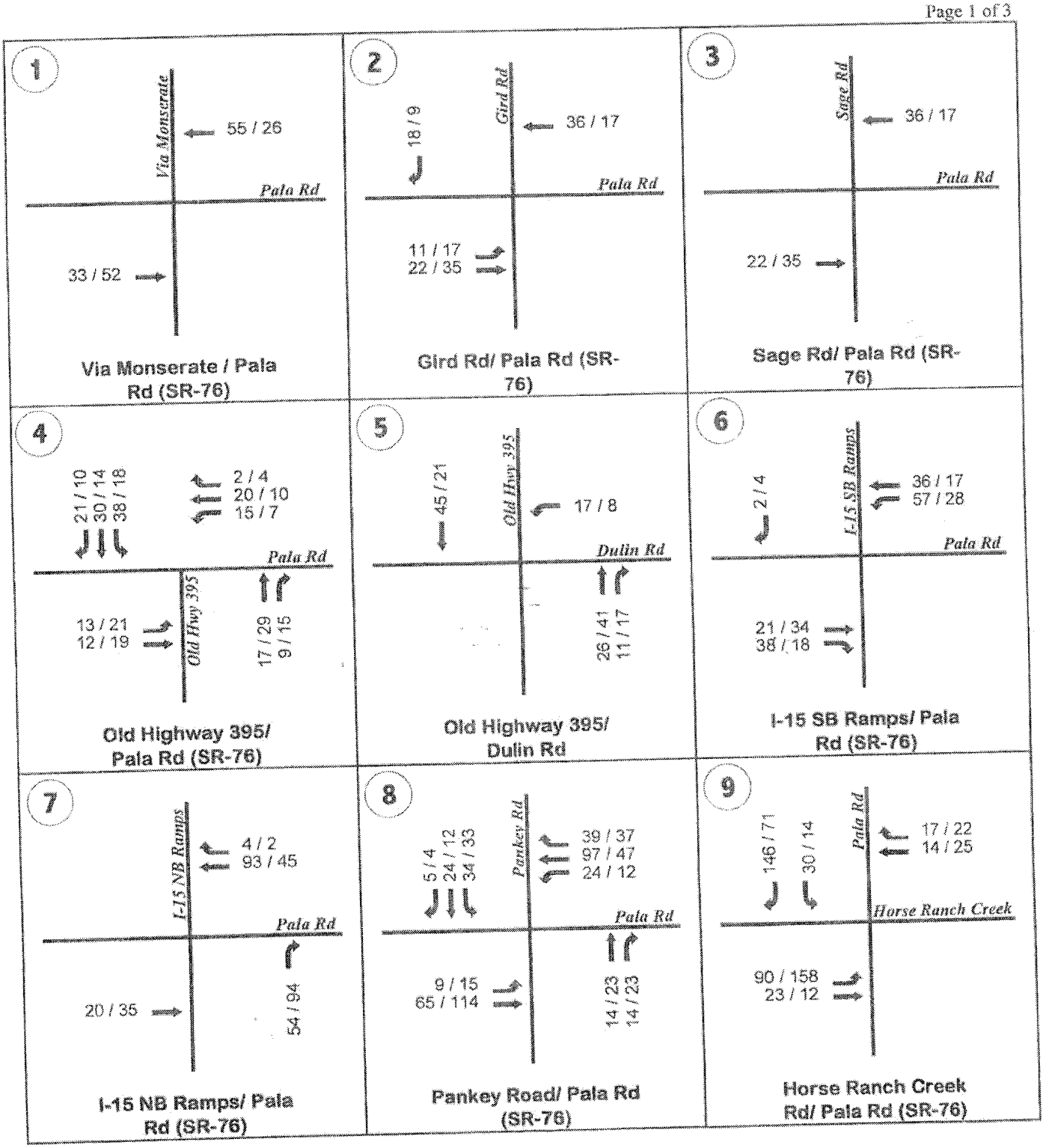


FIGURE 5-4

Project Only AM/PM Peak Hour Traffic

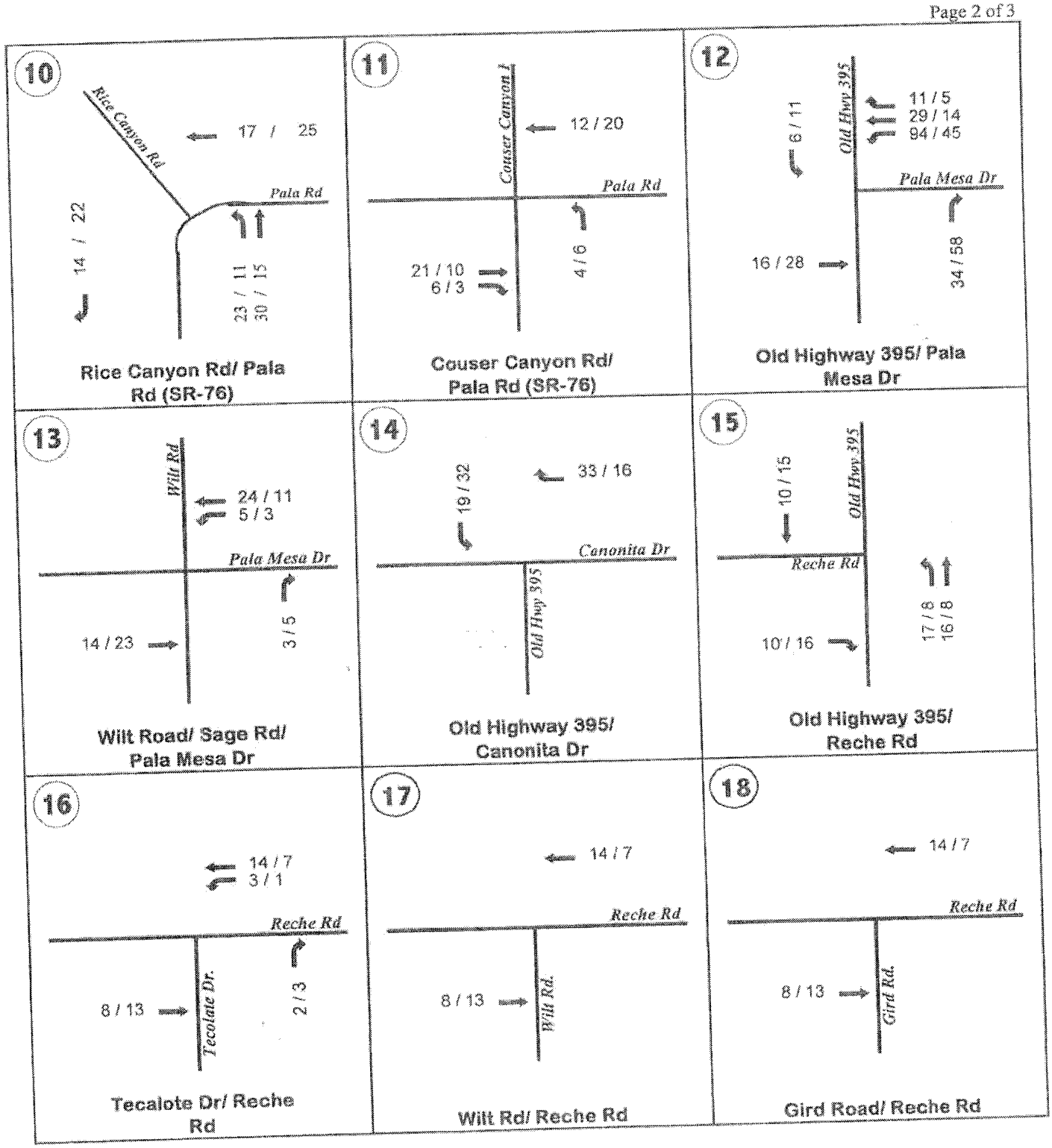


FIGURE 5-4

Project Only AM/PM Peak Hour Traffic

SDC DPLU RCVD 06-29-06

TM 5508

PROJECT FACILITY AVAILABILITY FORM

SCHOOL

SC

Please type or use pen
(Two forms are needed if project is to be served by separate school districts)

WHP Warner Ranch, L.P. (858)551-4390
Owner's Name Phone

7727 Herschel Avenue
Owner's Mailing Address Street

La Jolla CA 92037
City State Zip

ORG ____
ACCT ____
ACT ____
TASK ____
DATE ____

ELEMENTARY ____
HIGH SCHOOL ____
UNIFIED ____

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

A. LEGISLATIVE ACT
- [x] Rezones changing Use Regulations or Development Regulations
- [x] General Plan Amendment
- [x] Specific Plan
- [ ] Specific Plan Amendment

B. DEVELOPMENT PROJECT
- [x] Rezones changing Special Area or Neighborhood Regulations
- [x] Major Subdivision (TM)
- [ ] Minor Subdivision (TPM)
- [ ] Boundary Adjustment
- [ ] Major Use Permit (MUP), purpose: ____
- [ ] Time Extension ... Case No. ____
- [ ] Expired Map ... Case No. ____
- [x] Other Planned Residential Development Permit

C.
- [x] Residential ..... Total number of dwelling units 905
- [ ] Commercial ..... Gross floor area ____
- [ ] Industrial ..... Gross floor area ____
- [ ] Other ..... Gross floor area ____

D. Total Project acreage 513.61 Total number of lots 910

Assessor's Parcel Number(s)
(Add extra if necessary)

110	090	011
110	090	017
110	090	018
110	021	010

Thomas Bros. Page ____ Grid ____

Project address Pala Road
Street

Pala Pauma Subregion 92059
Community Planning Area/Subregion Zip

Applicant's Signature ____ Date ____

Address P.O. Box 676221 Rancho Santa Fe, CA 92067 Phone 858-756-8340

(On completion of above, present to the school district to complete Section 2 below.)

SECTION 2. FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District Name: BONSALL UNION

If not in a unified district, which elementary or high school district must also fill out a form? FALLBROOK H.S.

Indicate the location and distance of proposed schools of attendance. Elementary: Bonsall 9½ miles:

Junior/Middle: Norma Sullivan 8½ miles: High school: FALLBROOK H.S. miles: 11

- [x] This project will result in the overcrowding of the [x] elementary [x] junior/middle [x] high school. *(Check)*
- [x] Fees will be levied or land will be dedicated in accordance with Education Code Section 17620 prior to the issuance of building permits.
- [x] Project is located entirely within the district and is eligible for service.
- [ ] The project is not located entirely within the district and a potential boundary issue may exist with the ____ school district. Additional Mitigation Discussion Please, WMJ

Authorized signature: Wayne A. Jones Print name: WAYNE A. JONES

Print title: ASSISTANT SUPERINTENDENT BUS. SVC. Phone: (760) 631 5200 XT 105

On completion of Section 2 by the district, applicant is to submit this form with application to the Zoning Counter at the Department of Planning and Land Use, 5201 Ruffin Road, Suite B, San Diego, CA 92123.

DPLU 839(6c (9/1/01)

905 DU Warner Ranch

Alyssa Maxson
Item 4

FALLBROOK COMMUNITY PLANNING GROUP Pappas

Regular Meeting
Monday 16 May 2005, 7:00 P.M., Live Oak School, 1978 Reche Road, Fallbrook
MINUTES

Meeting called to order at 7:00 PM by First Vice Chair Harry Christiansen. 10 members were present, Jim Bowen, Harry Christiansen, John Crouch, Eileen Delaney, Jerry Donohue, Jim Oenning, Ike Perez, Mary Jane Pfeil, Bob Sabus, and Jack Wood. Carolyn Major, Jim Russell and Chuck Sanacore were excused, Bill Bopf and George McManigle were absent..

1. Open Forum. Opportunity for members of the public to speak to the Planning Group on any subject matter within the Groups jurisdiction but not on today's agenda. Three minute limitation. Non-discussion, & Non-voting item. NONE

2. Approval of the minutes for the meetings of 18 April 2005. Voting Item. Jerry Donohue so moved. Unanimous.

3. Site Plan review **request** for a mixed use project for one commercial space with frontage on Vine St. and two residential units in the rear located at 114 Vine St. **Request** withdrawn at the 18 April FCPG meeting. Owners/Contacts: Vine Street Partners, Vince Ross (723-83840 & Michael Weber. **Design Review Committee**. Community input. Voting item.

Mike Weber described the project and its location. The commercial building will be about 900 sq. ft., the residential building will occupy about 4000 sq. ft. Zoning requires 6 parking spaces, but 8 will be supplied. This project is being tested as a prototype in the newly established Village Zones. Design Review Committee had visited the site in April. They discussed it this month and voted unanimous approval of the Site Plan. Bob Sabus moved to approve the Site Plan as presented. Motion was approved unanimously, 10 to 0.

4. GPA05-003, SPA05-001, TM5424, REZ 05-005 & S05-014 Campus Park West (Pappas) project is **proposed** for the 100 acres located in the northeast corner of I-15 and SR76 and 18+acres in the southeast quadrant. It is a **request** that includes the processing of a vesting Tentative Map, Vesting Tentative Map Site Plan, Rezone, General Plan Amendment, an amendment to the Campus Park Specific Plan and V designator to allow for a mixed-use Master Plan. The **proposed** project consists of about 15 acres of General Commercial with 150,000 square feet of buildings and 8 acres of Office Professional Use (possible alternative site for multi-family residental of 87 dwelling units), approximately 10 acres of Highway Commercial uses (south of Highway 76 Pala Road), and approximately 23 acres of open space (includes a 4 acre park). The northeast quadrant includes 100 single family units, with a minimum lot size of 3150 square feet, plus another 466 multi-family units, for a maximum of 566 dwelling units (plus another possible 87 units on the Office Professional site). The **request** includes a rezone from S90 to S88. Owner/Applicant JPSD LLC (916) 447-7112, Contact person Randi Coopersmith (858) 751-0633. County planner Alyssa Maxson 858-694-3737 alyssa.maxson@sdcounty.ca.gov. **Land Use, Circulation, Design Review and Parks & Rec Committiees.** Community input. Non -voting item.

This proposed General Plan Amendment may or may not agree with that which the DPLU will propose as part of the 2020 Update. Randi Coopeersmith, John Pappas and Thad Johnson described the project, as roughly described above. Another ~18 acres south of SR 76 is proposed for roadside commercial purposes, such as gasoline sales, motel, etc. Geographic features make much of this property invisible from the freeway or SR 76. Caltrans owns a buffer strip between the Pappas land and the I-15 highway. The proposal is for 466 multi family DU and 100 single family homes.

Sheila Walson said Bonsall needs more parking. Gerald Walson remarked that the lot sizes are not compatible with the Fallbrook General Plan, and there should be a limit on the number of lots which can be built on. Monte Voight questioned the use of "primarily" in describing the commercial area, and promoted this location for the transportation node. Wallace Tucker pointed out there are three major projects in this area, with lots of commercial space. This is out of scale when compared with the 1984 Fallbrook General Plan. Many changes since then, more traffic, more casinos. Glenn _____ recommended having the infrastructure all in place before any development takes place. Joe Crews ?? said the traffic study will show overcrowded. Stephen Rosenbaum asked for lists of what is already approved but not built in Fallbrook. Alisa Martin asked why we had not talked about this project at the May 2 meeting, since it had been received by then. Paul Strubie did say that land owners have rights as to how to develop their lands. Someone asked about proposed features such as parks, trails, etc. Dee Lanzillo pointed out that this is premature insofar as there is no detailed scope of all three projects. The Planning group is elected by the community to study projects and make reasonable recommendations to the Supervisors.

Jack Wood read aloud the minutes of the Land Use Committee and the Circulation Committee, including remarks by each member insofar as this project is concerned. Bob Sabus, not a member of either committee, said it seems that the three developers are not working together. The entire area is proposed to be too crowded. Eileen Delaney commented that Planning Group members work hard in reviewing all the information from developers, including much that we actually receive in the committee meetings. The motion passed in the May 2 meeting applied to our recommendations to conceptual planning for all three projects. We have a good history in working with County staff in all major departments. The public does not want to have the 2.5 million square feet of industrial usage in the Passerelle project alone. We really want phased development to pre-approved plans. Jim Oenning likened the current plan to a "big box transfer station", which is not executable. Most of the wetland area is the result of runoff from agricultural operations, and may well disappear due to development. In any case the

Campus Park West TR 5424

MFR = 457

SFR = 109

466 DU

General Commercial — 10 Ac 150,000 SF Highway Com

Hotel = 110 Room

Gas Sta. = ⊘

Office Prof. = 8 Acres

Office = 8 AC x ___ = ⊘

General Com — 10 Ac x 1200 = 12,000

MF = 457 x 8 = 3,656

SF = 109 x 10 = 1090

Campus Park Specific Plan

6. S04-060 Site Plan for the construction of 1,612 Sq Ft pre-fab steel shop building located at 199 West Aviation Road. Owner/applicant Jaime Cortez 802-4702. Contact person Raul Silva 619-585-9139. County planner Ed Gowan 858-505-6380. **Design Review Committee**. Community input. Voting item.

Eileen Delaney said this project does not comply with the Fallbrook Design Guides. The location is zoned C-37. It would have only three roll-up doors on the interior side for access for autos to be repaired. The other three walls would be continuous with no architectural relief such as in the neighboring buildings. This type of consruction and material is not consistent with surrounding community character. Motion to deny the project based on non-conformance th Design Review Guidelines was approved by the committee unanimously. Eileen Delaney moved to deny it. Motion passed unanimously.

7. TPM20874 Request to subdivide the 3.11 acres into four lots for four dwelling units located at 311 Pala Mesa Drive. Owner Vladimir Safonoff 949-582-0770. Applicant and contact person Ralph Gonzalez 739-8931. County planner Christine Stephenson 858-694-3685. **Land Use Committee**. Community input. Voting item.

Harry Christiansen reported for Land Use Committee that he had not been able to reach the applicant, Mr. Gonzales, to attend the Committee meeting. The Committee had recommended continuance of all 3 of Mr. Gonzales projects. Mr. Gonzales protested that at least his Constant Creek project should be heard. Chair Russell ruled that all three projects be continued.

8. TM5398 Request to subdivide the 4.28 acres into seven lots for seven dwelling units located on the north side of Pala Mesa Drive west of Daisy Lane. Owner Murray Davidson 858-451-3209. Applicant and contact person Ralph Gonzalez 739-8931. County planner Elisa Maxon 858-694-3737. **Land Use Committee**. Community input. Voting item.

9. TPM20876 Request to subdivide the 5.08 acres into four lots plus a remainder for four dwelling units located at the southwest corner of Morro and Constant Creek Roads. Owner Constant Creek LLC. Applicant and contact person Ralph Gonzales 739-8931. The Planning Group continued this project as TM5391 at our Sept 04 meeting. County planner Elisa Maxson 858-694-3737. **Land Use Committee**. Community input. Voting item.

10. GPA03-04/SP03-04/R03-014/TM5338 Campus Park Specific Plan & General Plan Amendment for the 504.2 acres located at the north east corner of I-15 and SR76. The request is for 11.3 acres for an elementary school, 7.4 acres for a mixed use town center, 3.9 acres for highway commercial, 61 acres for office professional, 161 acres for 959 single family homes, 26.5 acres for 541 multi family units, 24.9 acres for roads, and 216.3 acres to be set aside as natural open space. Owner PASSERELLE LLC (619) 696-7355. Point of contact Chris Brown 809-7455. County planner Marette Esperance (858) 694-2969. **Land Use, Circulation, Design Review, Parks & Recreation and Public Facilities Committees.** Community input. Voting item.

Chris Brown and David Davis described a map of their project. The entrance as shown is in Pardee land. They show a neighborhood commercial area near SR 76, and a variety of office/industrial and residential neighborhoods. An alternate plan substitutes an 85 acre Palomar College campus for the office/industrial area. This matter will depend on a bond election to be called in 2 years. If the college option is chosen, there is proposed 1100 homesites; otherwise, the homes will number 1300. The highest density of homes will be at the center of the project. In either event, the project will have about 41% open space, and contain 6 ½ miles of trails. Passerelle is not a builder, so will sell off the various areas and coordinate all to their master plan.

Land Use Committee reported that the density is high. Smallest lots are 35 feet by 85 feet (3000 square feet). The preponderance are only 4500 sq. ft., and the largest are just 7500 sq. ft., or 7 to the acre. Circulation Committee said they need more information. They are getting the three projects piecemeal, not coordinated The three will generate about 102,000 average daily trips, not including college traffic. The committee recommends a new Interstate Highway connection at Stewart Canyon Road, with all three projects to participate in public road needs. Design Review Committee reported the school locations are not fixed yet, the traffic hard to imagine, and this project is still in study. Parks & Recreation Committee found insufficient open space, and nothing really defined. Public Facilities Committee had a general discussion, and noted the moving target of school locations.

Gerald Walson commented that the plan shows more homes in Passerelle than the company has EDUs fro Rainbow MWD hence there is no way to take any action. _____ Gonzales said that transportation is the real issue, and the infrastructure needs should come first. Jim Oenning says the housing density is too high for all three projects, suggested a hospital site on the Pappas land, the college is great!, and why not make this a large center for seniors. A school site could be across SR 76 at Lake Rancho Viejo. Monte Voight found a lack of information, too high density, a need for energy efficient facilities. Liz

Suchi showed a need for archeological [illegible] studies before ground is broken. Wallcead, Ecker pointed out the numbers: 5000 EDUs, 102,000 ADTs. Jim Tudor reminded us that for 15 years we have been developing "rural" as a definition for Fallbrook. Cathy Walls moved from Orange County, and does not want DPLU etc to put her "back there". Gordon Tinker pointed out that there is no assurance of a water supply, since Metropolitan does not favor perimeter annexation.

Response from Chris Brown: Passerelle now has 950 EDUs from RMWD, and is working on getting more. Their plan is in its infancy. Re traffic and highway proposals, Passerelle expects to begin a traffic study soon. The 3 different property owners have different agendas, different working methodologies, etc, but will have to cooperate. The transportation node needs definition. DPLU has proposed zoning east of Rice Canyon Road at one dwelling unit per 40 acres, which shows their intent to crowd a high density near the highway intersection.

Jim Russell asked how much of the Passerelle Plan is driven by DPLU. Brown says "Quite a bit!". Russell commented that if Palomar College is built, the lighted athletic fields and other facilities will adjoin or face residential areas. Russell asked if the justification for small lots was to get enough money to pay for the needed roads. No answer. Carolyn Major also commented on the small lots. Bill Bopf said this development will double the ADTs using SR 76. Our "NO" vote will be carried to the Board of Supervisors. The high housing density will generate gang activity, just as in downtown. Eileen Delaney felt that emergency services will suffer badly. How does a developer mitigate traffic generation? Carolyn Major asked about widening SR 76; in reply, Chris Brown discussed the paving required for the quarry, and how they could cooperate with that work. Harry Christiansen commented that a map was submitted in September, 2003 which used 950 EDUs, but the project now needs 1500 EDUs. Brown said that David Sibbet is now the planner he deals with. Jack Wood said that NCFPD may not actually have to provide service east of the wedge at the entrance to the Passerelle property. Harry Christiansen mentioned that the Poet Square project has larger lots than are proposed here. He then handed out copies of a proposed motion. Carolyn Major asked to include a section dealing with traffic, which was accepted. The revised motion is:

Harry Christiansen moved continuation of this GPA and its related maps, because we need more information from the proponent and more time to study the issues, which include the following:

- **The proposed map indicates that the general land plan for the industrial and multifamily areas is less than imaginative, and does not contain any of the innovative design features required by the Fallbrook Community Plan as follows:**
    - **The industrial and multifamily sites appear to be simple cookie-cutter blocks that were designed for easy development and sale. The proponents have provided no information for building sizes, arrangements or project amenities.**
    - **The industrial (or college) area is about ¾ of a mile long (!) and is quite narrow, and fronts directly across the main road from residential neighborhoods.**
    - **The multifamily sites are nothing more than rectangular "blobs" which appear to be future ghettos without specific information about proposed buildings, amenities and land use.**
- **The proposed residential density is extreme (at the least), and is achieved only by having building lots that are not allowed in Fallbrook except for mobile home parks.**
    - **The largest lots are located on an area presently zoned for one home for each two acres, and are generally defined as being 55 feet by 90 feet. (By comparison the smallest los presently permitted in Fallbrook are 6,000 square feet.)**
    - **The largest number of lots are only 45 feet by 90 feet.**
    - **And the smallest lots re only 35 feet by 85 feet !!!**
    - **In addition, the proponent has not provided any solid information about proposed home sizes and how they would be sited.**

The proponent's concept of the project does not even appear to be well thought out. We note that an elementary school site is located in the wrong school district, and "might" have to be relocated to another site that is presently described as a future park.

- **The project will incur s tantial increase in traffic volume on S[ ] and I-15, as well as Old 395 and East Mission which will adversely affect the quality of life in both Fallbrook and Bonsall on the west side of I-15.**

This motion received 13 (unanimous) votes in favor.

11. TPM20878 Request to subdivide the 6.14 acres into two lots for two dwelling units located at 3615 Lake Ridge Road. Owner George Solorzano 733-3968. Contact person David Lowen 724-7674. County planner Nick Martinez 858-694-3013. **Land Use Committee.** Community input. Voting item.

Mr. Lowen was not present. The property is a 6 acre lot in an upscale project which is largely built out. This lot was not subdivided earlier because of layout considerations insofar as sewage disposal. Economics now justify using a horizontal pit to serve the existing home. The existing leach field is located so that it can serve a home on the new lot. Harry Christiansen moved approval of the subdivision as presented. Approval was unanimous.

12. TPM20881 Request to subdivide the 2.87 acres into four lots for four dwelling units located at the end of Hill Court. . Owners Robert Hokanson & Jeannette Shields 728-8855. Contact person Dale Green 728-4406. County planner Flores Bishop 858-495-5241. **Land Use Committee.** Community input. Voting item

Dale Green described this as an infill in this area of Fallbrook. 2/3 of the site is now an avocado grove. The remainder has lot of rock outcroppings. The site will be entered from Hill Court via a steep private road through the rocky section. The Land Use Committee questioned storm water runoff. Green said 2/3 of the runoff will go west, toward a palm nursery. The remainder will flow onto Hill Court. Joe and Penny Fedorchek own land abutting Hill Court and fear the runoff will go into their land. Dale Green said the developer will have to dissipate the runoff. Harry Christiansen moved to approve the subdivision as presented, with a recommendation that the County review the storm water runoff situation. Motion approved unanimously.

13. Request that the Department of Planning and Land Use reimburse North County Fire Protection District $97.04 and $154.64 for the use of their paper and copy machine. Voting item.

Jane Comella moved to approve this reimbursement. Motion passed unanimously.

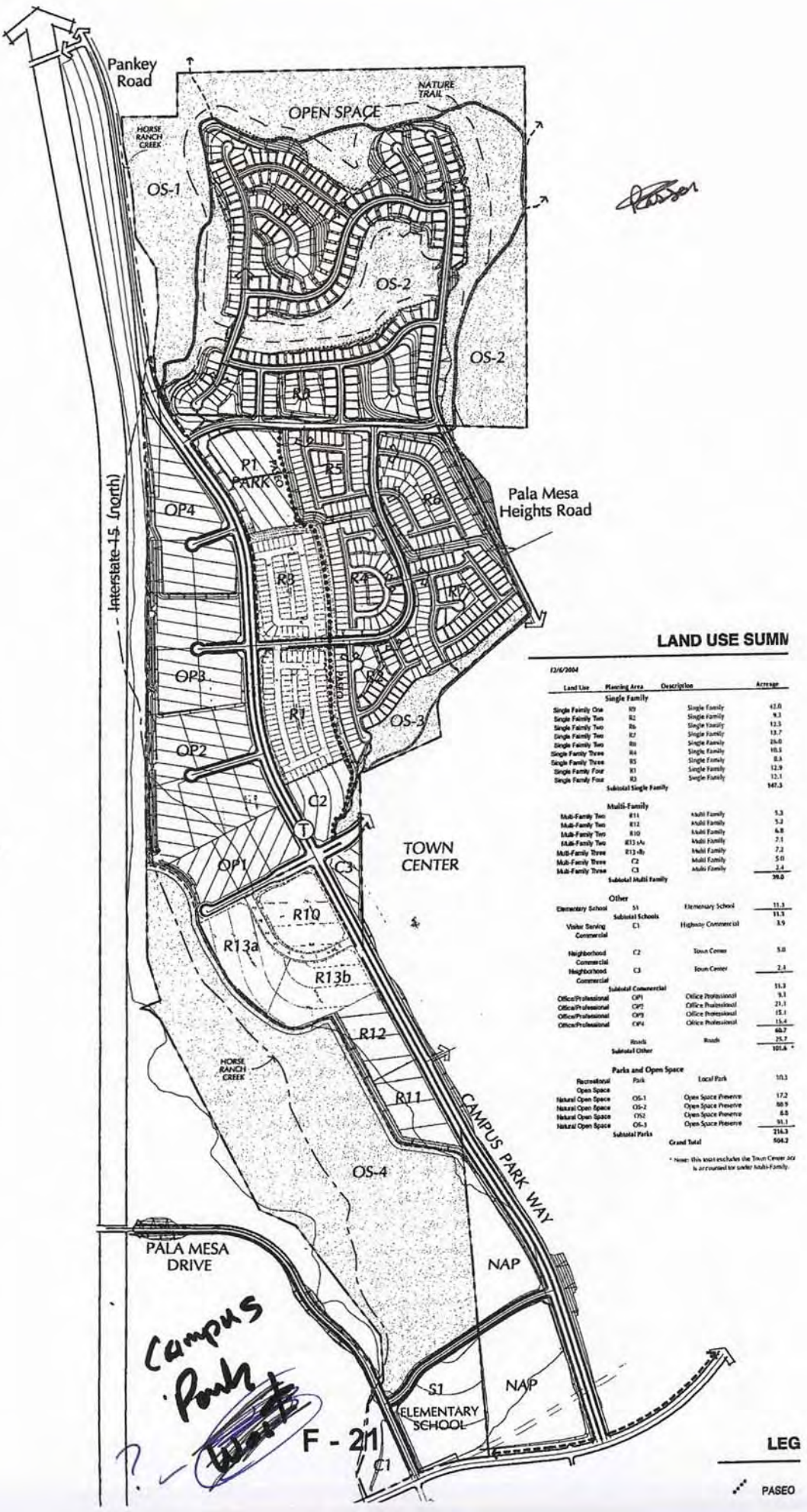
Adjourned 9:35 PM

Jim Bowen, secretary

Cc:

DPLU	Debbie Raglin	
	Rose Blake	Item 5
	Ed Gowans	Item 6
	Christine Stevenson	Item 7
	Elisa Maxson	Item 8, 9
	David Sibbet	Item 10 My agenda says Esperance, applicant says Sibbet.
	Marette Esperance	Item 10
	Nick Martinez	Item 11
	Flores Bishop	Item 12
	Susie Vaughn	Item 13
DPW	Steve Ron	Item 3
DPR	Matt Bohan	Item 4

Fallbrook Chamber of Commerce



LAND USE SUMM

12/6/2004

Land Use	Planning Area	Description	Acreage
Single Family			
Single Family One	R9	Single Family	42.0
Single Family Two	R2	Single Family	9.3
Single Family Two	R6	Single Family	13.5
Single Family Two	R7	Single Family	13.7
Single Family Two	R8	Single Family	26.0
Single Family Three	R4	Single Family	10.5
Single Family Three	R5	Single Family	8.3
Single Family Four	R1	Single Family	12.9
Single Family Four	R3	Single Family	12.1
Subtotal Single Family			167.3
Multi-Family			
Multi-Family Two	R11	Multi Family	5.3
Multi-Family Two	R12	Multi Family	5.2
Multi-Family Two	R10	Multi Family	6.8
Multi-Family Two	R13 sAr	Multi Family	7.1
Multi-Family Three	R13 sBr	Multi Family	7.2
Multi-Family Three	C2	Multi Family	5.0
Multi-Family Three	C3	Multi Family	2.4
Subtotal Multi Family			39.0
Other			
Elementary School	S1	Elementary School	11.3
Subtotal Schools			11.3
Visitor Serving Commercial	C1	Highway Commercial	3.9
Neighborhood Commercial	C2	Town Center	5.0
Neighborhood Commercial	C3	Town Center	2.4
Subtotal Commercial			11.3
Office/Professional	OP1	Office Professional	9.1
Office/Professional	OP2	Office Professional	21.1
Office/Professional	OP3	Office Professional	15.1
Office/Professional	OP4	Office Professional	15.4
			60.7
	Roads	Roads	29.7
Subtotal Other			101.6 *
Parks and Open Space			
Recreational Open Space	Park	Local Park	10.3
Natural Open Space	OS-1	Open Space Preserve	17.2
Natural Open Space	OS-2	Open Space Preserve	80.9
Natural Open Space	OS2	Open Space Preserve	8.8
Natural Open Space	OS-3	Open Space Preserve	93.1
Subtotal Parks			214.3
		Grand Total	504.2

* Note: this total excludes the Town Center are is accounted for under Multi-Family.

LEG

Campus Park - from this study
Trip Generation

	Daily	Am	Pm
SF = 529	5240	423	529
MF = 276	2208	177	221
MF = 191	1146	92	103
Town Ctr = 72,000	8640	346	864
Prof Off = 157,000	2512	301	301
High Gen = 140,000	16,800	672	1680
Park = 10.6	530	69	48
	37,126	2080	3746

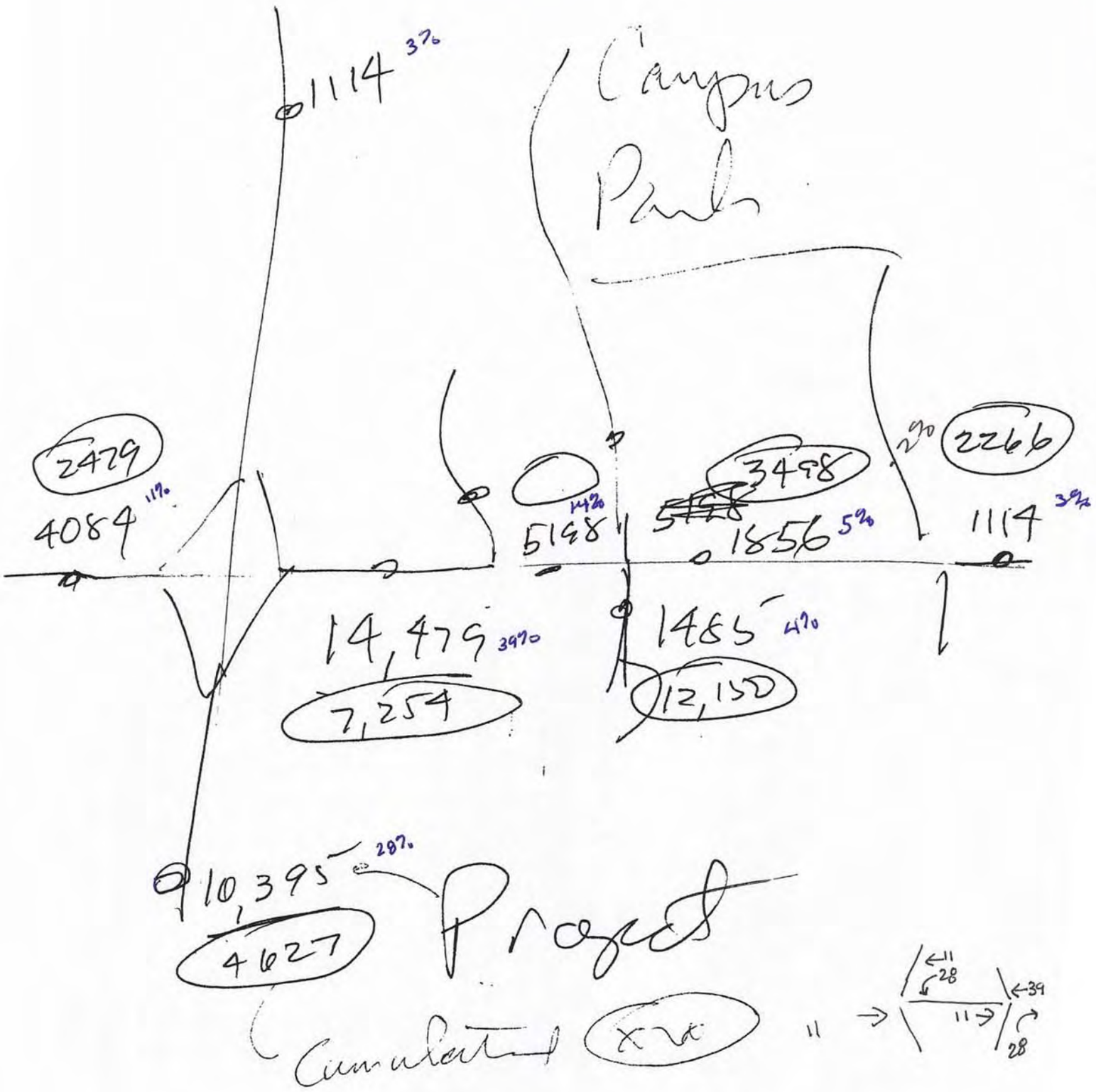

1114 3%
Campus
Park
2479
4084 11%
5148 14%
3498
1856 5%
2266 9%
1114 3%
14,479 39%
7,254
1485 4%
12,150
10,395 28%
4627
Project
Cumulative
XX
11
28
39
11
28

Table 6
Trip Generation Rates

Land Use	Units (Students FTE)	Daily Rate	AM Peak Hour			PM Peak Hour		
			Total	Inbound	Outbound	Total	Inbound	Outbound
Community College (2 year)	2,833	1.2	12%	80%	20%	9%	60%	40%

Source: SANDAG, *Not So Brief Guide* (April 2002)

Table 7 shows the forecast project-generated trips for the proposed project. As shown, the proposed project is forecast to generate approximately 2,833 trips per day, which includes approximately 408 a.m. peak hour trips and approximately 306 p.m. peak hour trips.

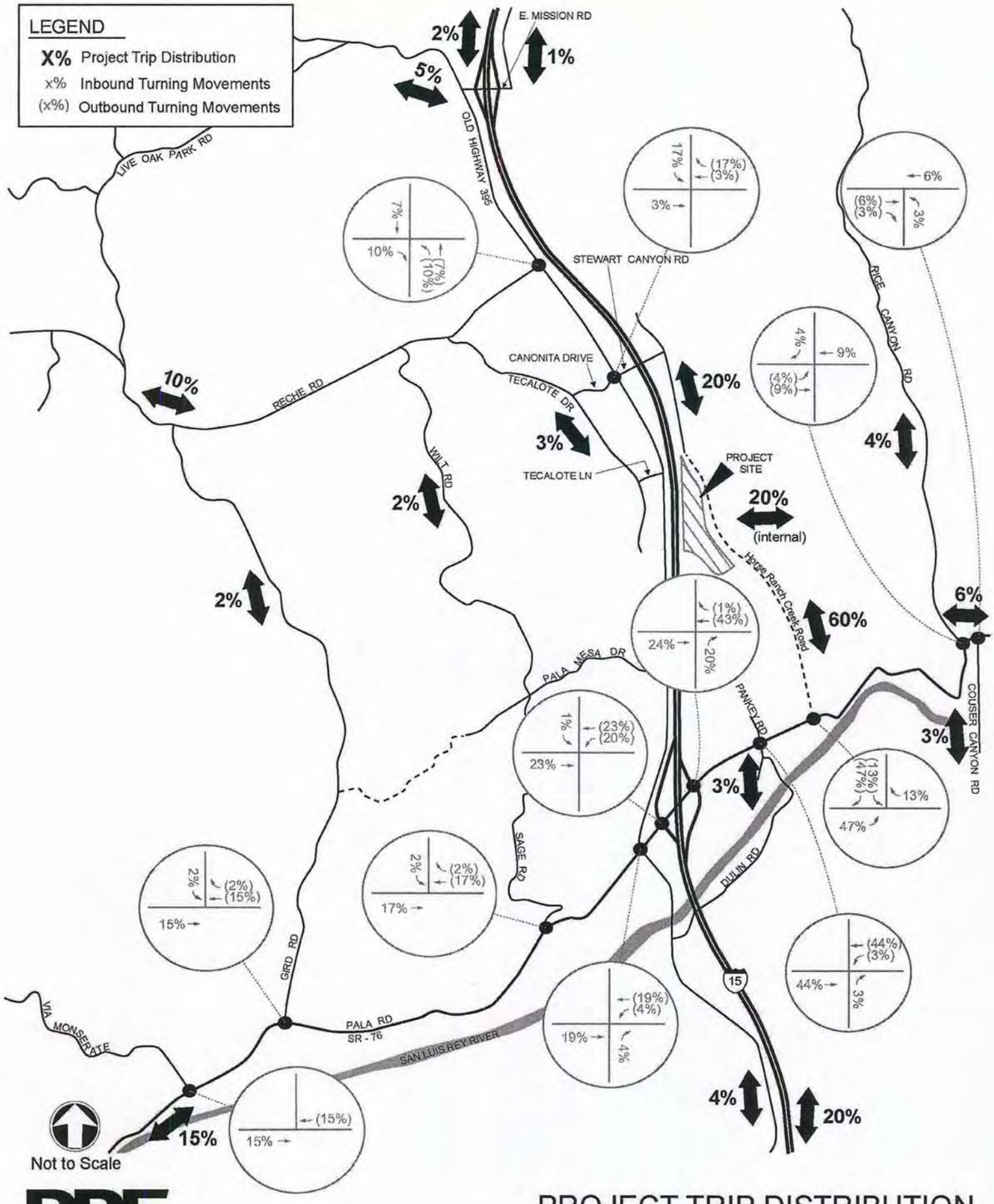
Table 7
Forecast Project-Generated Trips

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		Total	Inbound	Outbound	Total	Inbound	Outbound
Community College (2 year)	3,400	408	326	82	306	184	122

Note: based on SANDAG, *Not So Brief Guide* (April 2002)

Project Trip Distribution and Assignment

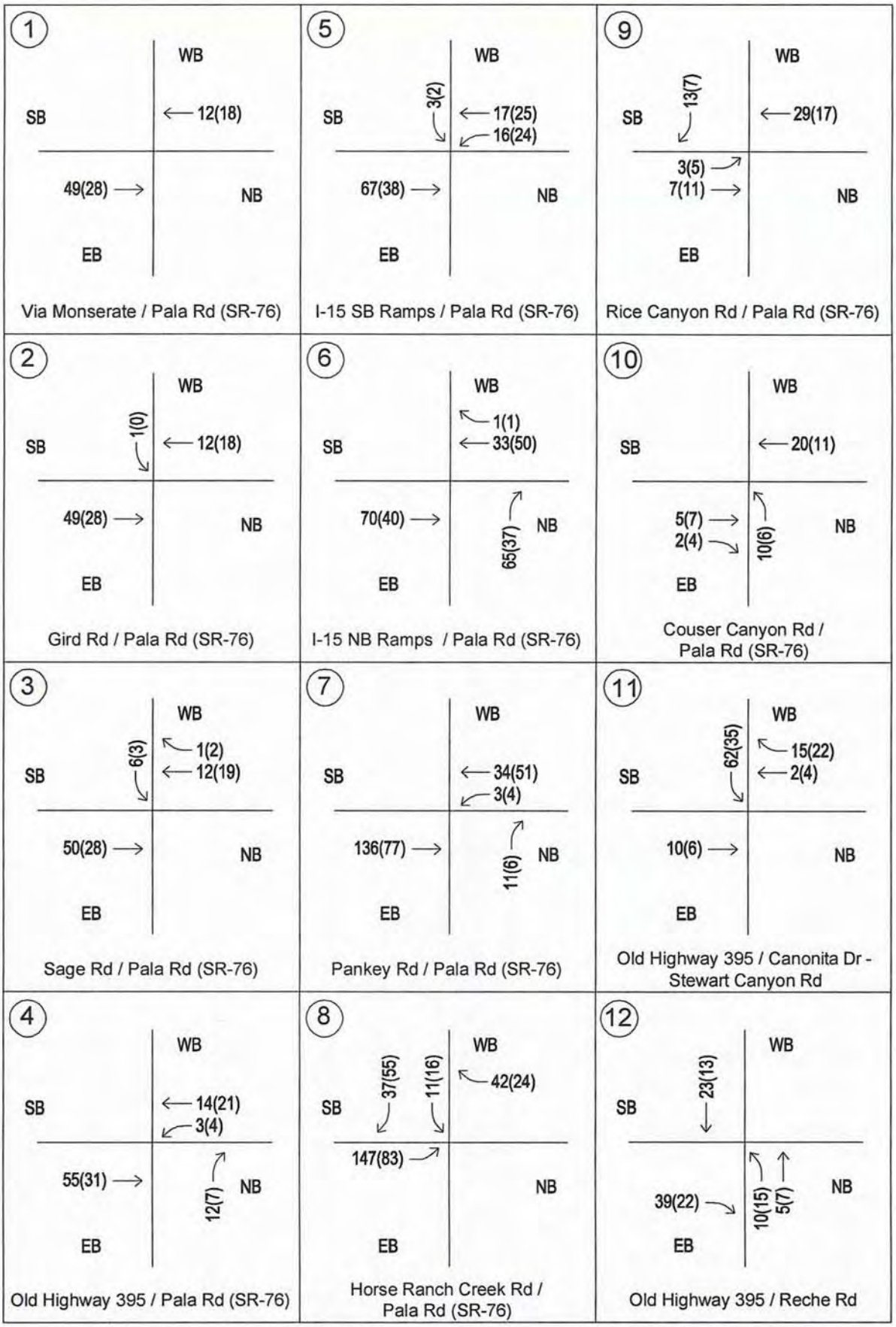
Trip distribution percentages were calculated using a select zone analysis based on the SANDAG Series 10 traffic model, updated for General Plan 2020. Exhibit 7 shows the forecast trip percent distribution of project-generated trips. The forecast project-generated trips were assigned to the roadway network for peak hour and daily trips. For existing plus project, cumulative plus project, and Horizon Year plus project conditions, assumptions included the construction of Horse Ranch Creek Road extension. Exhibit 8 illustrates the peak hour trip assignment. Daily project trip assignment is illustrated in Exhibit 9. Internal project distribution is discussed in greater detail later in this report.



PROJECT TRIP DISTRIBUTION

JN25-102230.001 JULY 2007

Exhibit 7



xx(xx) am/pm peak hour volume

Palomar Community College - North Education Center
Project Description

July 23, 2007

The **Palomar Community College - North Education Center project (Proposed Project)** proposes development of a new Community College center to serve the Northern San Diego County area. The project site is approximately 85 acres of (presently) undeveloped land, generally located east of Interstate 15 (I-15), between Pala Road/State Route 76 (SR 76) and Pala Mesa Heights Drive, in the community of Fallbrook.

The project site is located within a well-defined north-south trending valley within the I-15 corridor, with steep hills rising to the east and west. Land immediately surrounding the project site is generally undeveloped or utilized for agricultural operations. To the north of the site is undeveloped land; to the east, a large-scale avocado grove is maintained; to the south is an undeveloped, largely undisturbed property supporting pasture land and Southern riparian forest; to the west is Interstate 15. Further to the south, and just to the south of SR 76, is the San Luis Rey River, which generally trends in an east-west direction across the valley floor in the vicinity of the site.

Land uses proposed with the project include parking, classroom and administration buildings, and outdoor recreational space and athletic fields. Facilities anticipated would include instructional space (lecture and laboratory), administrative services, a library, offices, a student services center, food services, maintenance/operations, and other support services. Development of the project site would be phased over several decades, with ultimate buildout estimated in the year 2030 with a student enrollment of 8,500 of which 2,833 are considered as the Full Time Equivalent (FTE) (Refer to the additional Traffic Tables and Figures I included). Furthermore, the initial opening of the school is scheduled for 2011.

The project site also includes a Native Area of approximately 30 acres in the southern portion of the property. The Native Area consists of a mixture of non-native and wetland habitats. No development is proposed in this area as part of the Proposed Project; however, development of this area may occur at a future point in time, if the District determines additional property is needed to support the educational programming of the center.

The following provides a summary of the proposed facilities and land uses, based on the *Palomar Community College District Master Plan 2022* (August 2003):

- Structures
- Temporary Buildings and Construction Staging Areas
- Parking & Access Roads
- Outdoor Recreational Areas
- Setbacks / Common Open Space /

Total: Approximately 85 Acres

Offsite improvements would include improvements to the following intersections:

1) Old Highway 395/Stewart Canyon Road and Canonito Drive;
2) SR 76/Pankey Road; and,
3) SR 76/Horse Ranch Creek Road.

Horse Ranch Creek Road, which would provide the main access to the education center, would be constructed from (existing) Pankey Road to the north of the project site to SR 76 to the south.

The Rainbow Municipal Water District (RMWD) would provide both water and sewer service to the project site. Water lines would be extended to the site from Pankey Road (north) to SR 76 along (proposed) Horse Ranch Creek Road. A sewer line would also be extended to the site from Pankey Road to an existing sewer line which runs to the west of the project site. In addition, an offsite borrow area to provide additional soil required to prepare the site for development is also proposed near the northeastern property boundary, across future Horse Ranch Creek Road.

Vicki Haskell

From: Bill Darnell [bdarnell@darnell-assoc.com]
Sent: Monday, November 05, 2007 7:35 AM
To: 'Vicki Haskell'
Subject: FW: TM5499 Club Estates: Pala & Pauma casino trip generation assumptions - CLARIFICATION

From: Ortiz, Francisco "Nick" [mailto:Francisco.Ortiz@sdcounty.ca.gov]
Sent: Friday, November 02, 2007 8:42 AM
To: Bill Darnell
Cc: Goralka, Robert J; Sinsay, Edwin M; Moriarty, Jerry
Subject: RE: TM5499 Club Estates: Pala & Pauma casino trip generation assumptions - CLARIFICATION

Bill,

Clarification: The trip generation estimates that I identified would include trips that are currently being generated by both casinos.

The Pala casino expansion (50K sf.ft more of gaming area) would generate about 5,000 new trips. The Pauma TEIR estimated about 4,500 new trips due to the casino and hotel expansion. The Pauma TEIR did not use the standard gaming area trip rate. We estimated that the Pauma casino and hotel expansion would generate about 6,500 new trips.

Nick O

From: Ortiz, Francisco "Nick"
Sent: Friday, November 02, 2007 8:32 AM
To: 'Bill Darnell'
Cc: Goralka, Robert J; Sinsay, Edwin M; Moriarty, Jerry
Subject: RE: TM5499 Club Estates: Pala & Pauma casino trip generation assumptions

Bill,

The Pauma TEIR assumed that 92% of the project trips would distribute west towards I-15. The Pala TEIR had a similar trip distribution assumption (90/10 split).

Nick O

From: Bill Darnell [mailto:bdarnell@darnell-assoc.com]
Sent: Friday, November 02, 2007 8:23 AM
To: Ortiz, Francisco "Nick"
Subject: RE: TM5499 Club Estates: Pala & Pauma casino trip generation assumptions

Nick

Thanks

Is their a distribution assignment for these trips . Using a 50/50 split will add over 11,000 trips to Sr76 pushing it up to a 4 lane collector .

Bill Darnell

From: Ortiz, Francisco "Nick" [mailto:Francisco.Ortiz@sdcounty.ca.gov]
Sent: Friday, November 02, 2007 7:43 AM
To: Cindy Eldred; bdarnell@darnell-assoc.com
Cc: Grunow, Richard; Sinsay, Edwin M; Stevenson, Christine; gszytel@sbcglobal.net; Moriarty, Jerry
Subject: TM5499 Club Estates: Pala & Pauma casino trip generation assumptions

Bill & Cindy,

According to the Pala TEIR, the proposed casino expansion will result in the casino gaming area being increased by 50,503 square feet from 72,497 to 123,000 square feet. The standard casino trip rate is 100 trips per 1,000 square feet of gaming area. The expanded Pala casino would generate an estimated 12,300 trips per day.

The Pauma TIA identified that expanded casino gaming area of 90,600 square feet and a 400-room hotel. The casino and hotel would generate an estimated 10,260 trips per day.

Thanks,

F.Nick Ortiz

County of San Diego, Department of Public Works

Transportation Division

Transportation Planning/Route Locations section

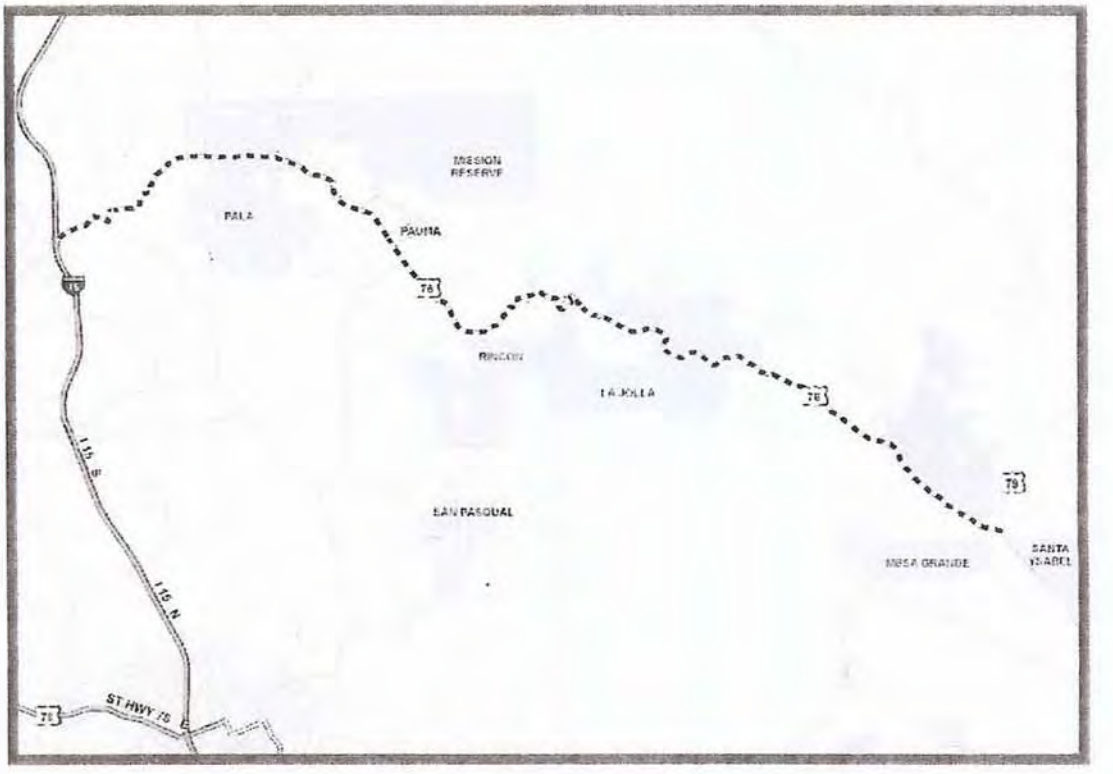
Phone: 858-874-4204

Fax: 858-874-4028

MS 0334

Excerpts from SR-76 East Corridor Study, March 2007

SR-76 EAST CORRIDOR STUDY



PREPARED BY:
RESERVATION TRANSPORTATION AUTHORITY

CONSULTANTS:
SPRINGER & ASSOCIATES, INC.
LINSCOTT, LAW & GREENSPAN

FUNDED BY:
CALIFORNIA DEPARTMENT OF TRANSPORTATION

March 2007

1.0 INTRODUCTION

The Reservation Transportation Authority (RTA) with funding provided by the California Department of Transportation (CALTRANS), has prepared a study to investigate current traffic operations and identify achievable proposed Operational and Near Term Improvements for the State Route 76 corridor. In addition, the study has identified the approximate projected cumulative traffic effects of proposed development along the corridor.

The emphasis of the study was focused on the development of partnerships with Native American Tribal Governments, the County of Dan Diego, local community planning groups, the San Diego Association of Governments (SANDAG), resource agencies, developers, and the public. Based on identified Operational Improvements, the study has developed a cooperative approach for the funding of these improvements.

2.0 PURPOSE OF STUDY

The study was undertaken with the purpose of developing a number of key elements and goals as follows:

- Investigate Current Traffic Operations and Impacts.
- Determine Operational and Near Term Improvements.
- Prepare Approximate Long Term Traffic Forecasts and Modeling.
- Develop Feasibility Level Costs and Potential Funding Sources for Recommended Operational Improvements.
- Foster Partnerships with Native American Tribal Governments, Public Agencies, and Private Interests.

3.0 MAJOR STUDY TASKS

The major study tasks for the SR-76 East Corridor Study are as follows:

- Primary Focus of Study is the Identification of Operational and Near Term Improvements for the Corridor.
- Prepare List of Stakeholders. (See Appendix B for Final Stakeholders List)
- Collect Historical Information, Traffic and Corridor Data, and Analyze Current Traffic Operations and Impacts.
- Develop Preliminary Operational Improvements and Schematic Drawings.
- Prepare List of Preliminary Near Term Improvements.
- Develop Preliminary Approximate Traffic Forecasts.
- Obtain Input from Stakeholders Meetings on Preliminary Results of Corridor Study.
- Based on Input from the Stakeholders Meetings, Prepare Revisions to Proposed Operational Improvements and Schematic Drawings, and Adjustments to Proposed Near Term Improvements.
- Prepare Project Cost Estimates for Proposed Operational Improvements.
- Identify Potential Funding Sources for Proposed Operational Improvements.
- Prepare and Circulate Draft Report for Comments.
- Complete and Circulate Final Report.

6.0 EVALUATION OF JANUARY 2006 SR-76 TRANSPORTATION CONCEPT SUMMARY REPORT

In early 2006, Caltrans prepared a Transportation Concept Summary for SR-76 as a beginning point for the evaluation of the corridor needs. This summary included the roadway segment from the I-5 freeway to the I-15 freeway, and the easterly segment from the I-15 freeway to SR-79. Information was provided in the summary on existing and future average weekday traffic volumes, general recommendations for future major road improvements, and potential operational improvements for the entire SR-76 Corridor from I-5 to SR-79. The complete summary report can be found in Appendix A.

The summary report noted that further study and analysis was required for many of the proposed operational improvements. As a result, Caltrans contracted with the Reservation Transportation Authority to develop the SR-76 East Corridor Study.

6.1 January 2006 Caltrans Proposed Operational Improvements

The summary report included the following potential key operational improvements:

- Curve corrections PM 18.80 to 19.00
- Left Turn Channelization Rice Canyon Road PM 19.39
- Westbound Sight Distance Improvement PM 20.50
- Curve Corrections PM 20.70 to 22.20
- Eastbound Passing Lane PM 26.1 to 26.6
- Curve Correction PM 26.86
- Left and Right Turn Channelization Pauma Reservation Road PM 28.99
- Left and Right Turn Channelization Cole Grade Road PM 29.87
- Eastbound Passing Lane PM 31.3 to 32.0
- Curve Corrections PM 31.50
- Intersection Improvements Poomacha Road PM 41.11
- Intersection Improvements Sengme Oaks Road PM 41.57
- Intersection Improvements La Jolla Campground Road PM 41.68

The above list of proposed operational improvements are shown on Figures 6.1-1 and 6.1-2.

8.0 CRITERIA, DESCRIPTION AND PRELIMINARY PROJECT COST ESTIMATES FOR PROPOSED OPERATIONAL IMPROVEMENTS

The criteria for the proposed operational improvements are as follows:

- The improvements must be practical in nature and can designed and constructed in a short time period (1-2 Years).
- No additional right-of-way will be required for the proposed operational improvements.
- The improvements will not require any significant environmental studies.
- The cost of each proposed operational improvement will not exceed $1,000,000.

Based on the results of the study and input from stakeholder meetings, the following are descriptions of the recommended operational improvements for the corridor. These improvements should reduce the potential for accidents, improve traffic flow and provide some level of mitigation for traffic impacts.

- PM 20.20 Place 25 MPH speed advisory (warning) signs in both directions.
- PM 23.6 Install lighting improvements at the intersection of East Pala Mission Road and SR-76.
- PM 28.99 At intersection of Pauma Reservation Road and SR-76, increase the left turn pocket by approximately 60 feet to 300 feet total, lower the roadway to the east and west of the intersection to improve vertical sight distance and provide signalization at the intersection.
- PM 32.9 At Valley Center Road and SR-76 intersection, extend existing left turn pocket by approximately 34 feet to 120 feet total, and provide speed warning and directional signage.
- PM 41.57 For the intersection of SR-76 and Sengme Oaks Road, improve the horizontal sight distance to the west of the intersection along with speed warning signage. This proposed operational improvement may become a proposed near term improvement due to possible environmental issues such oak tree removal / mitigation.
- PM 41.68 At the intersection of SR-76 and La Jolla Campground Road, install an approximate 75 foot left turn pocket on SR-76 for entry to the campground road, improve horizontal sight distance to the east of the intersection along with speed warning signage. This proposed operational improvement may also become a

PROPOSED OPERATIONAL IMPROVEMENTS

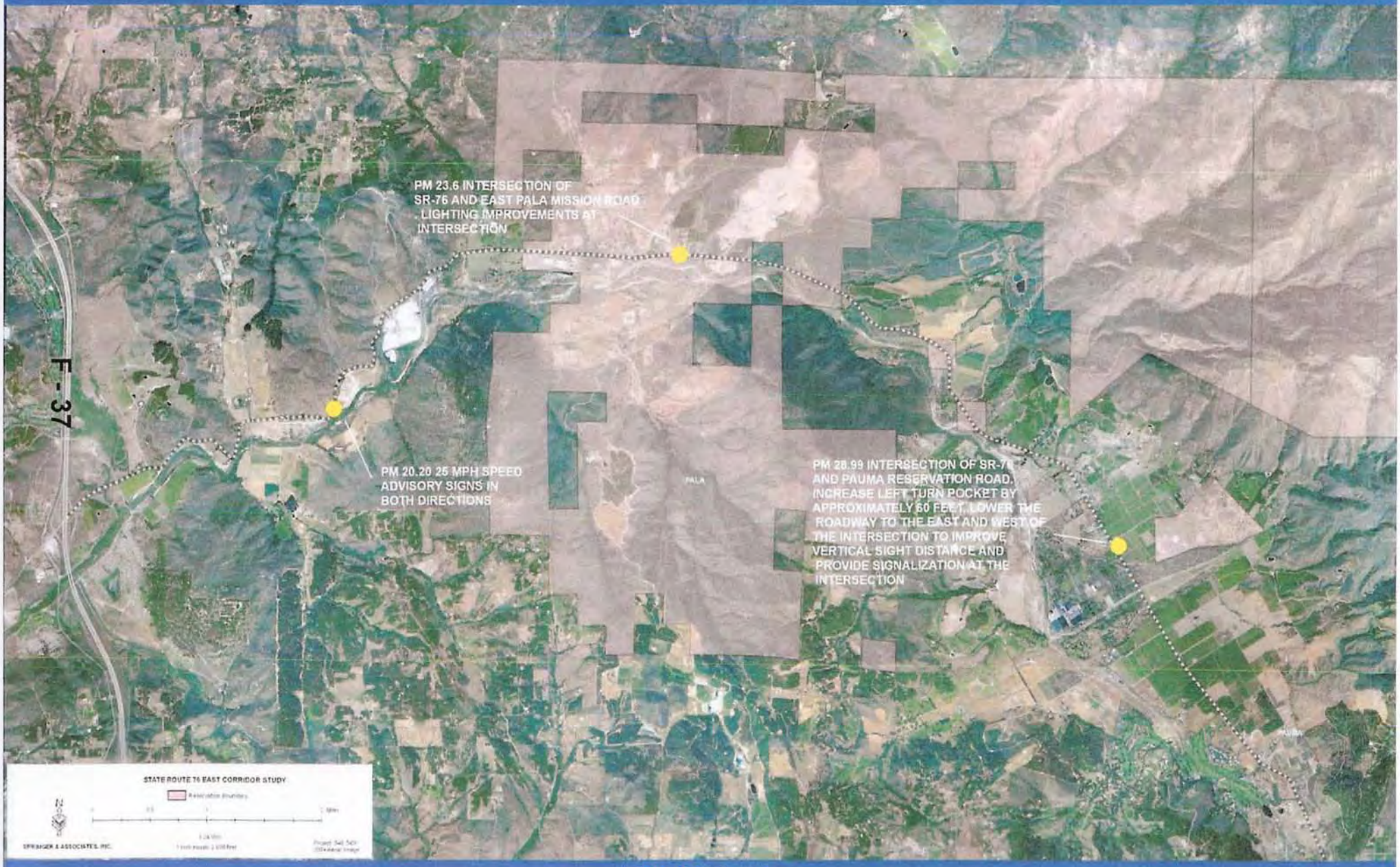
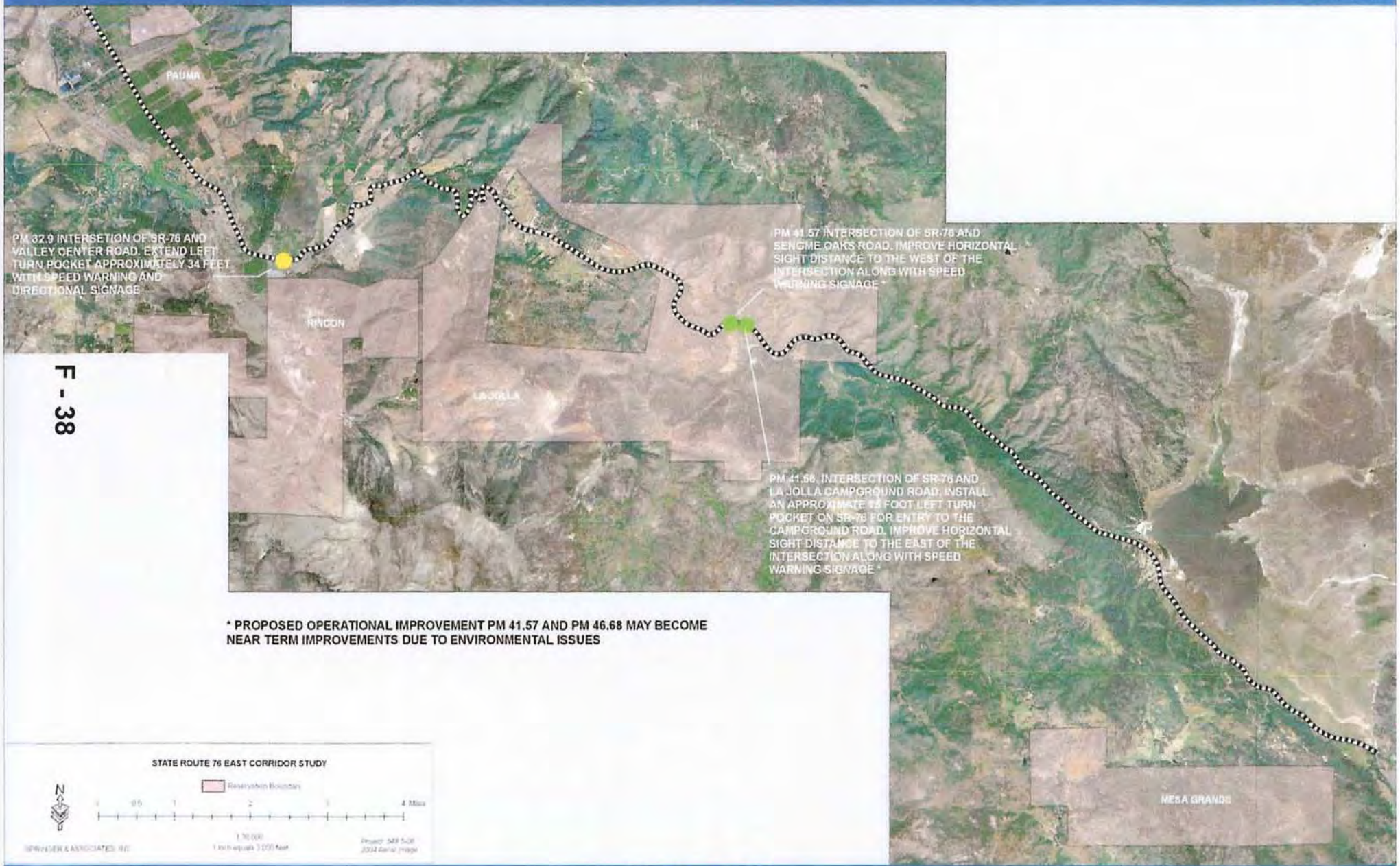


FIGURE 8.0-1

PROPOSED OPERATIONAL IMPROVEMENTS



*** PROPOSED OPERATIONAL IMPROVEMENT PM 41.57 AND PM 46.68 MAY BECOME NEAR TERM IMPROVEMENTS DUE TO ENVIRONMENTAL ISSUES**

FIGURE 8.0-2

PROPOSED OPERATIONAL IMPROVEMENTS
SCHEMATIC DRAWINGS

SCALE: NTS

LEFT TURN WARNING SIGN WITH 25 MPH ADVISORY SPEED PLATE

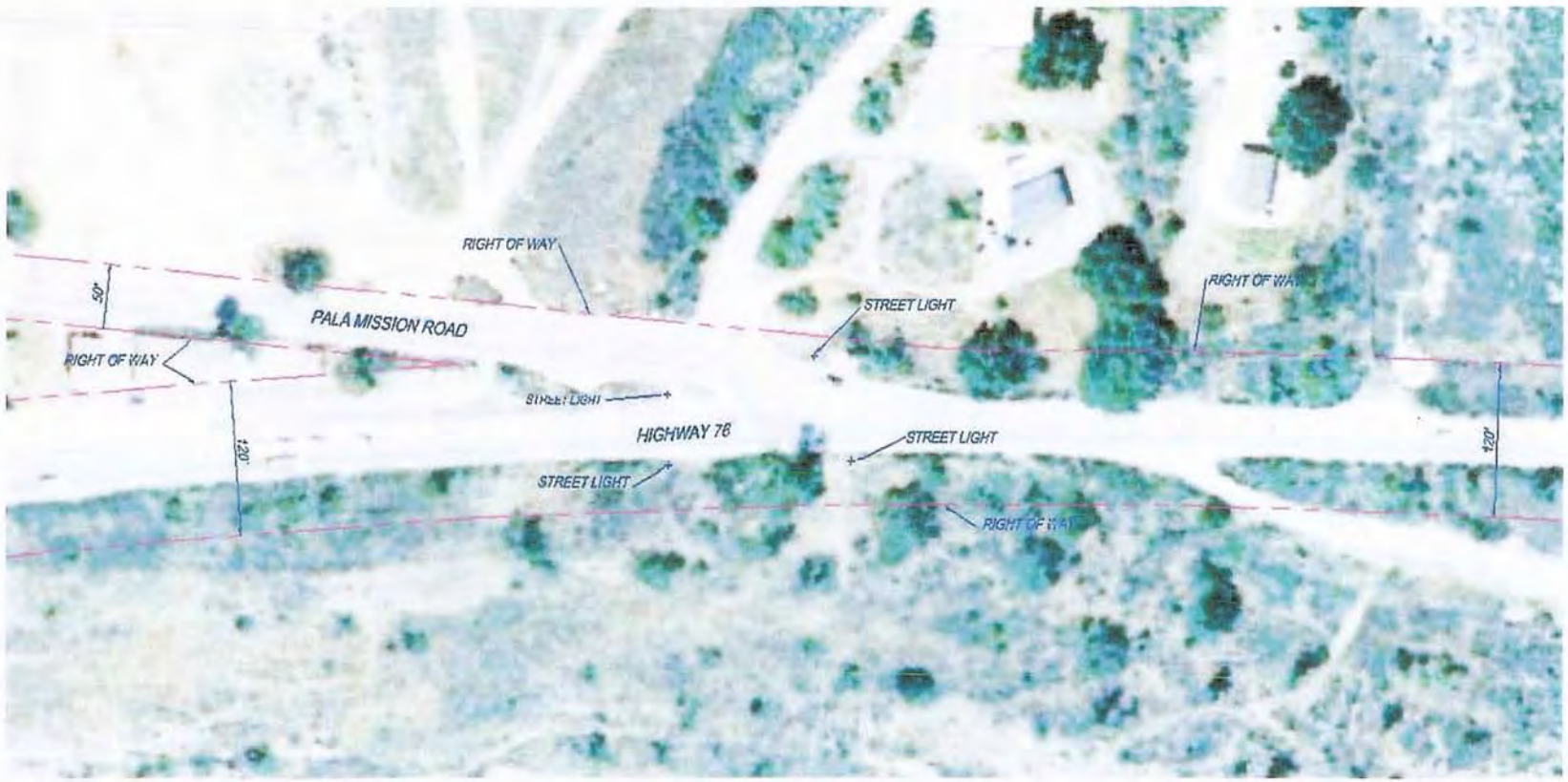
RIGHT TURN WARNING SIGN WITH 25 MPH ADVISORY SPEED PLATE

SR-76 - POST MILE 20.2

FIGURE 8.0-3

PROPOSED OPERATIONAL IMPROVEMENTS
SCHEMATIC DRAWINGS

SCALE: NTS



PALA MISSION ROAD AND 76 INTERSECTION

SR-76 EAST - POST MILE 23.6

FIGURE 8.0-4

SCALE: NTS

PROPOSED OPERATIONAL IMPROVEMENTS
SCHEMATIC DRAWINGS

PAUMA RESERVATION ROAD AND HWY 76 INTERSECTION

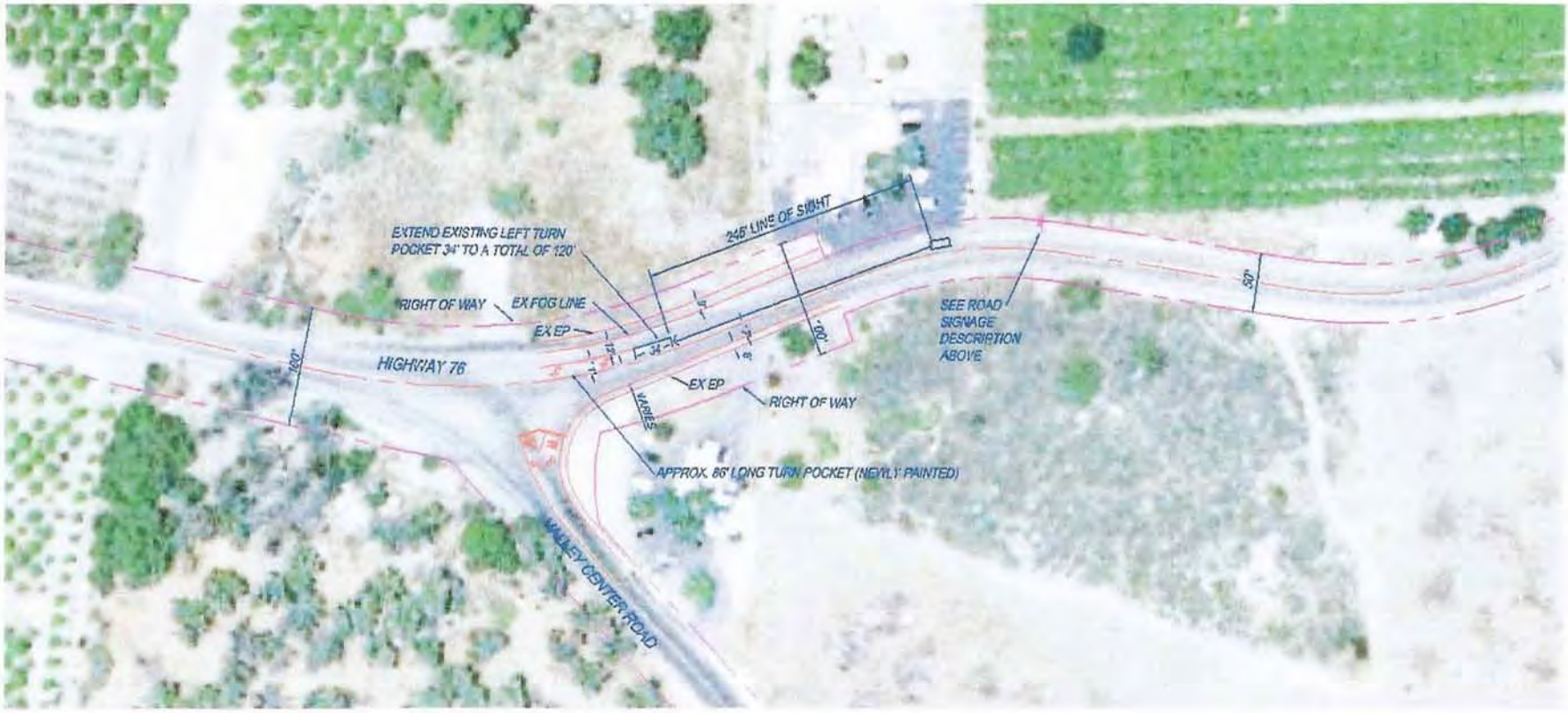
SR-76 EAST - POST MILE 28.99

FIGURE 8.0-5

SCALE NTS

PROPOSED OPERATIONAL IMPROVEMENTS
SCHEMATIC DRAWINGS

DIRECTIONAL ROAD SIGNAGE
FOR INDIAN RESERVATIONS



VALLEY CENTER ROAD AND HWY 76 INTERSECTION

SR-76 EAST - POST MILE 32.9

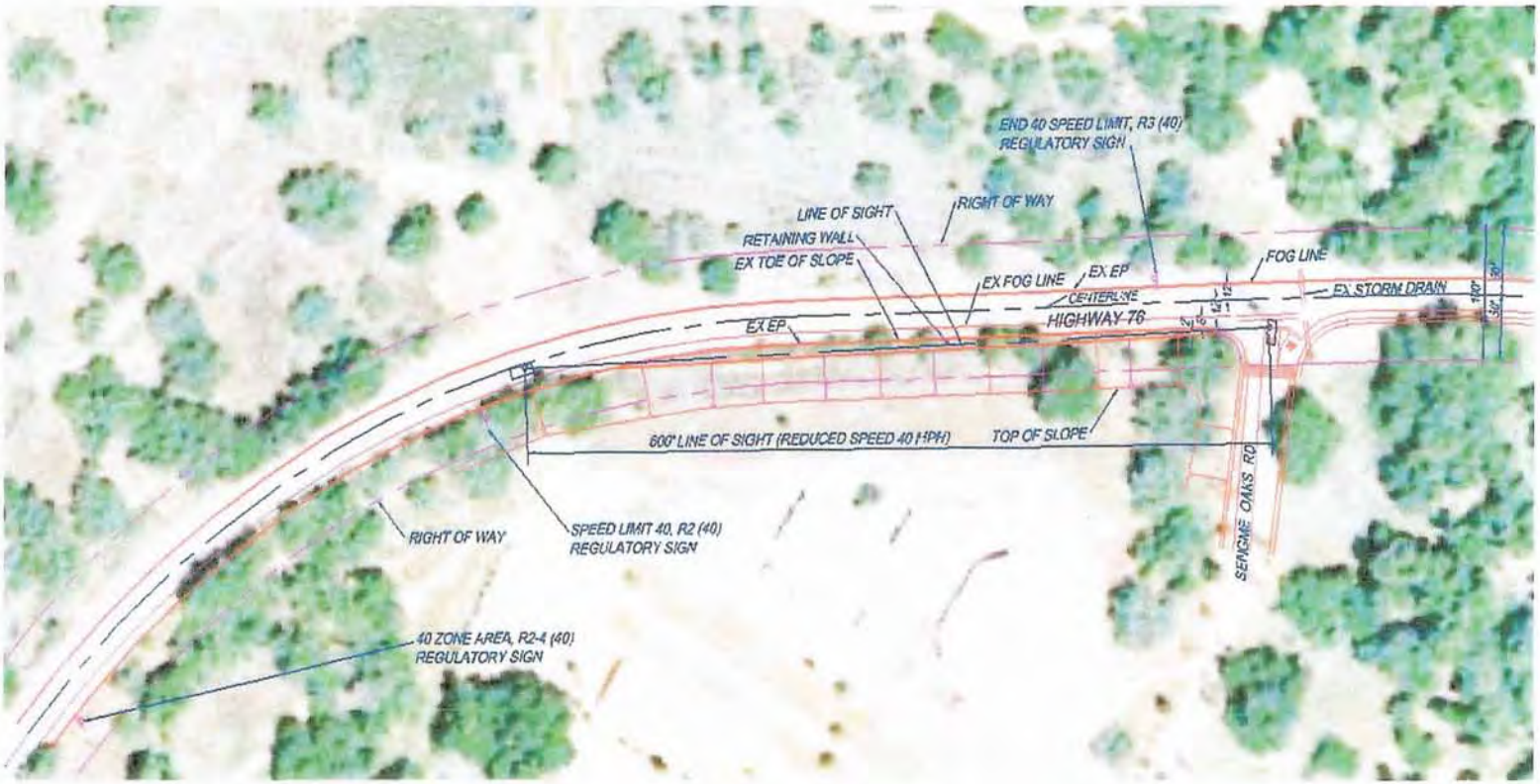
NOTE:
SPEED REDUCTION WARNING SIGNAGE TO BE POSTED AND LOCATED ACCORDING TO CALTRANS STANDARDS.

F - 42

FIGURE 8.0-6

PROPOSED OPERATIONAL IMPROVEMENTS*
SCHEMATIC DRAWINGS

SCALE NTS



F - 43

LA JOLLA INDIAN RESERVATION - SENGME OAKS ROAD

SR-76 EAST - POST MILE 41.57

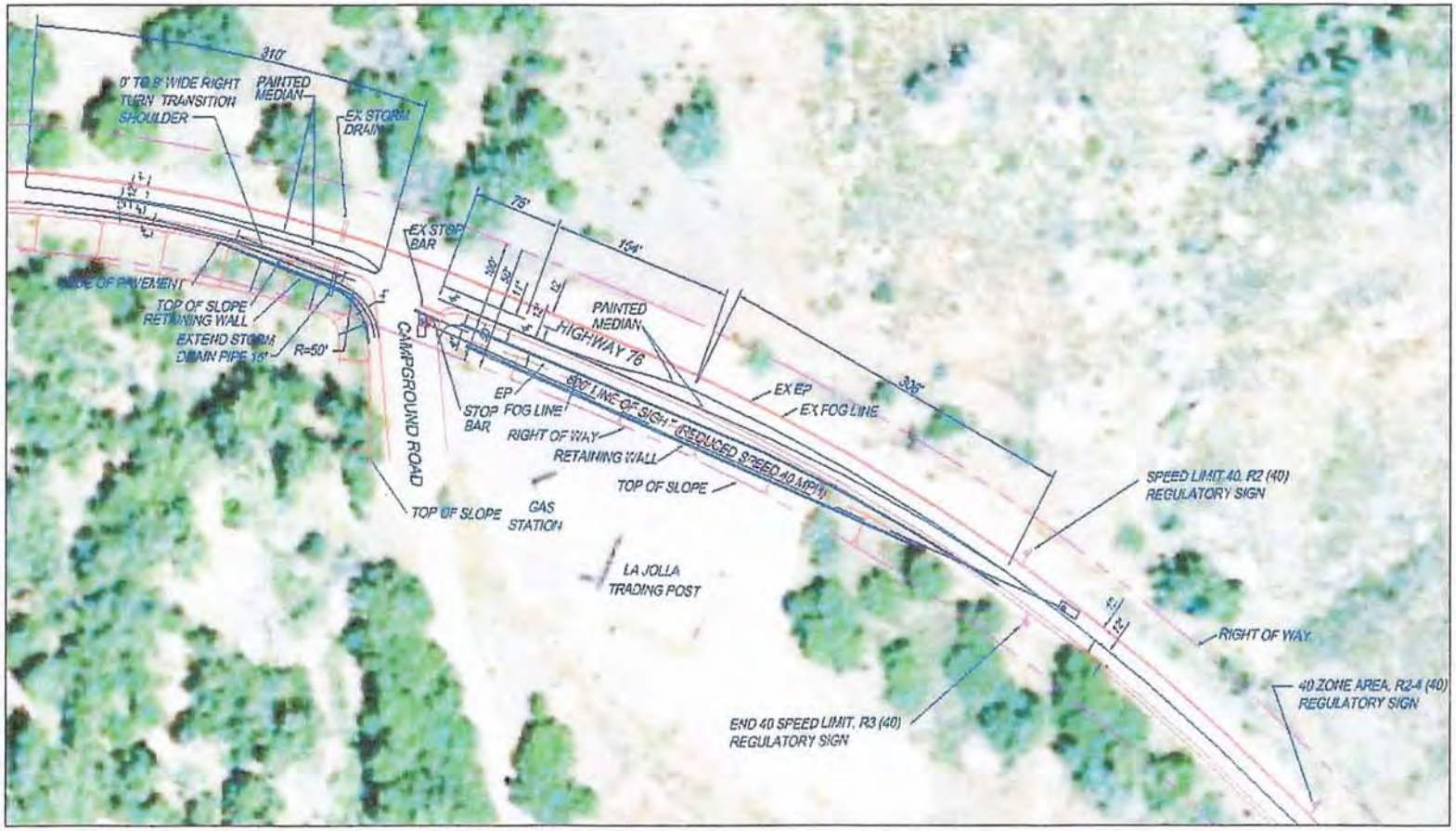
* THIS PROPOSED OPERATIONAL IMPROVEMENT MAY BECOME A NEW TERM IMPROVEMENT DUE TO ENVIRONMENTAL ISSUES.

NOTE:
SPEED REDUCTION WARNING SIGNAGE TO BE POSTED AND LOCATED ACCORDING TO CALTRANS STANDARDS.

FIGURE 8.0-7

PROPOSED OPERATIONAL IMPROVEMENTS*
SCHEMATIC DRAWINGS

SCALE NTS



F - 44

* THIS PROPOSED OPERATIONAL IMPROVEMENT MAY BECOME A NEW TERM IMPROVEMENT DUE TO ENVIRONMENTAL ISSUES.

LA JOLLA INDIAN RESERVATION - CAMPGROUND ROAD

SR-76 EAST - POST MILE 41.68

NOTE:
SPEED REDUCTION WARNING SIGNAGE TO BE POSTED AND LOCATED ACCORDING TO CALTRANS STANDARDS.

FIGURE 8.0-8

9.0 CRITERIA AND DESCRIPTION OF PROPOSED NEAR TERM IMPROVEMENTS

The criteria for the proposed near term improvements are as follows:

- Improvement is a Present Need
- Environmental Studies and/or Right-of-Way Acquisition is Required
- The Cost of Each Item May Exceed $1,000,000
- Fund and Construct Within the Next 5-10 Years

The following are descriptions of proposed near term improvements based on the results of the study and input from stakeholder's meetings.

- Curve Corrections PM 18.80 to 19.00
- Left Turn Channelization Rice Canyon Road PM 19.39
- Westbound Sight Distance Improvement PM 20.50
- Curve Corrections PM 20.70 to 22.20
- Eastbound Passing Lane PM 26.1 to 26.6
- Curve Correction PM 26.86
- Left and Right Turn Channelization Cole Grade Road PM 29.87
- Eastbound Passing Lane PM 31.3 to 32.0
- Curve Correction PM 31.50
- Intersection Improvements Poomacha Road PM 41.11

The above list of proposed near term improvements are shown on Figures 9.0-1 and 9.0-2.

TABLE 8-1
PRELIMINARY PROJECT COST ESTIMATE
PROPOSED OPERATIONAL IMPROVEMENTS

	Item	Unit	Quantity	Unit Price	Total Price
	Valley Center Road and SR-76				
	SR-76 Post Mile 32.9				
1.	4" Wide Pavement Markings	L.F.	2,400	$1.00	$2,400
2.	Directional Road Sign for Indian Reservations	EA.	1	$1,600	$1,600
3.	Subtotal Construction Cost:				$4,000
4.	Construction Contingency Cost (15%)				$600
5.	Administrative / Engineering Cost (30%)				$1,200
6.	**Total Preliminary Project Cost:**				**$5,800**
	Sengme Oaks Road and SR-76				
	SR-76 Post Mile 41.57				
1.	Sandblast and Remove Pavement Markings	L.F.	180	$2	$360
2.	Remove Trees	EA.	5	$1,000	$5,000
3.	Excavation	C.Y.	500	$20	$10,000
4.	Pavement Markings	L.F.	180	$1	$180
5.	Retaining Wall	S.F.	1,900	$50	$95,000
6.	Regulatory Sign R2-4 (40) - (40 Zone Area)	EA.	1	$400	$400
7.	Regulatory Sign R2 (40) - (Speed Limit 40)	EA.	1	$400	$400
8.	Regulatory Sign R3 (40) - (End 40 Speed Limit)	EA.	1	$400	$400
9.	Subtotal Construction Cost:				$111,740
10.	Construction Contingency Cost (15%)				$16,761
11.	Administrative / Engineering Cost (30%)				$33,522
12.	**Total Preliminary Project Cost**				**$162,023**
	La Jolla Campground Road and SR-76				
	SR-76 Post Mile 41.68				
1.	Clearing and Grubbing (slope area only)	S.F.	1,400	$0.45	$630
2.	Sandblast and Remove Pavement Markings	L.F.	1,850	$2	$3,700
3.	Sawcut, Demolish and Remove 6" Asphalt	S.F.	800	$2	$1,600
4.	Excavation	C.Y.	224	$20	$4,480
5.	6" Asphalt Concrete over 8" Class II Base	S.F.	4,600	$4.60	$21,160
6.	Subgrade Grading (paving preparation)	S.F.	4,600	$0.40	$1,840
7.	Pavement Markings	L.F.	2,900	$1	$2,900
8.	Retaining Wall	S.F.	2,060	$50	$103,000
9.	Regulatory Sign R2-4 (40) - (40 Zone Area)	EA.	1	$400	$400
10.	Regulatory Sign R2 (40) - (Speed Limit 40)	EA.	1	$400	$400
11.	Remove Tree	EA.	1	$1,000	$1,000

PROPOSED NEAR TERM IMPROVEMENTS

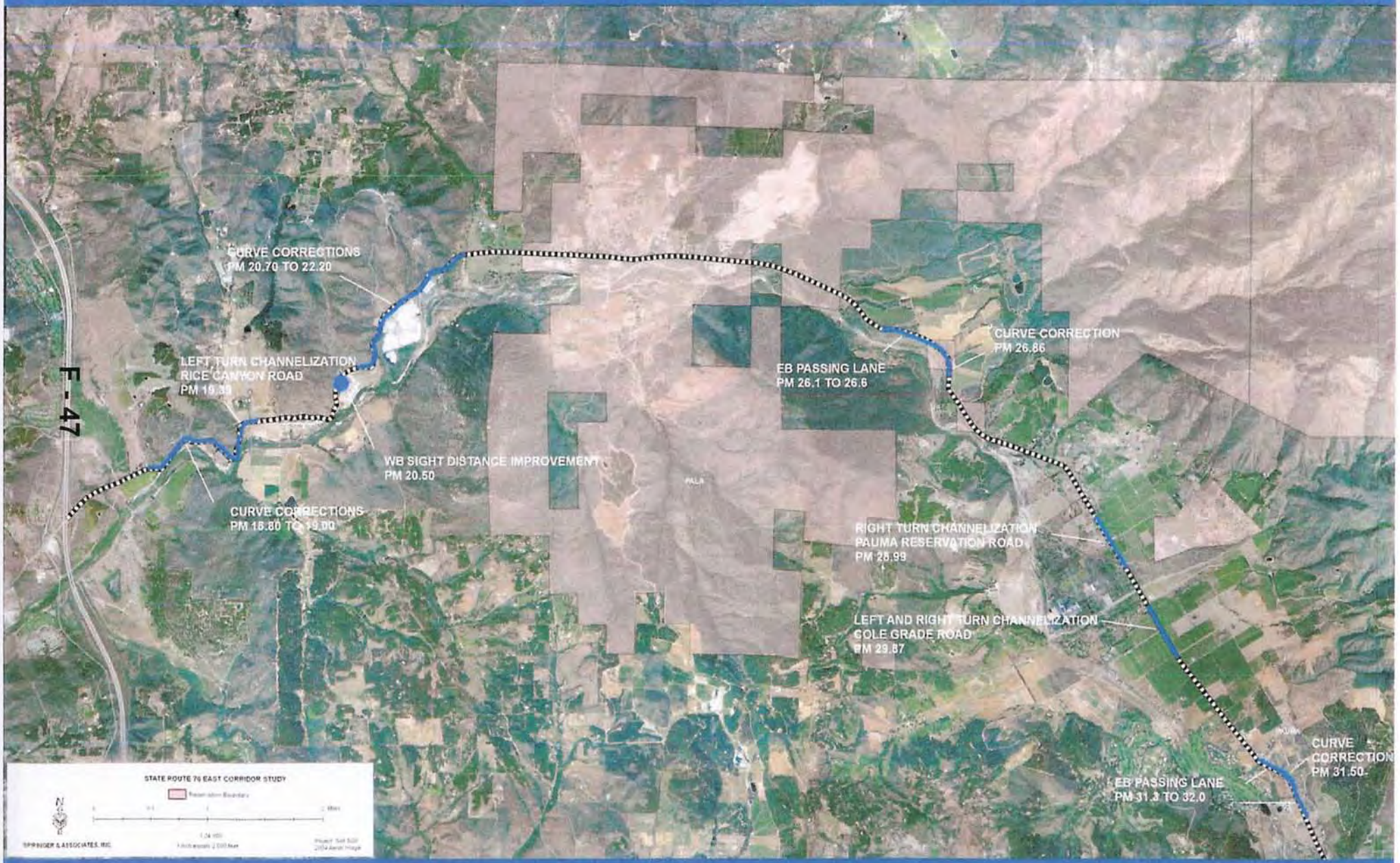


FIGURE 9.0-1

PROPOSED NEAR TERM IMPROVEMENTS, CONTINUED

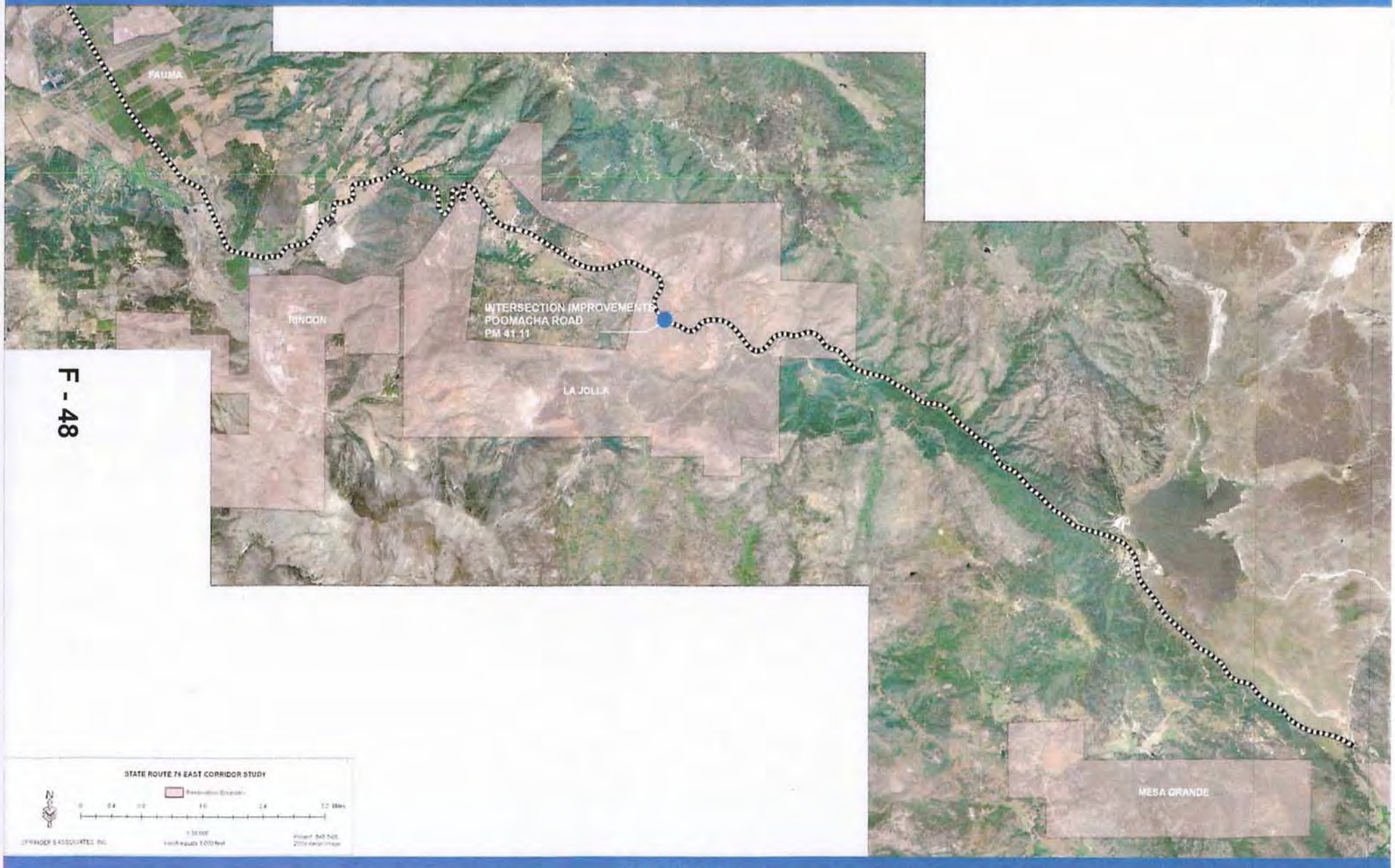


FIGURE 9.0-2

APPENDIX G

- Project Access Analysis Worksheets

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	266	6	3	196	14	7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	317	7	4	233	17	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			324		561	320
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			324		561	320
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			1236		488	721

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	324	237	25
Volume Left	0	4	17
Volume Right	7	0	8
cSH	1700	1236	546
Volume to Capacity	0.19	0.00	0.05
Queue Length 95th (ft)	0	0	4
Control Delay (s)	0.0	0.1	11.9
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	11.9
Approach LOS			B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	451	17	9	424	7	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	475	18	9	446	7	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			493		949	484
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			493		949	484
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	99
cM capacity (veh/h)			1071		286	583

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	493	456	12
Volume Left	0	9	7
Volume Right	18	0	4
cSH	1700	1071	352
Volume to Capacity	0.29	0.01	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	0.3	15.6
Lane LOS		A	C
Approach Delay (s)	0.0	0.3	15.6
Approach LOS			C

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	292	15	8	225	35	18
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	348	18	10	268	42	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			365		643	357
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			365		643	357
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		90	97
cM capacity (veh/h)			1193		434	688

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	365	277	63
Volume Left	0	10	42
Volume Right	18	0	21
cSH	1700	1193	496
Volume to Capacity	0.21	0.01	0.13
Queue Length 95th (ft)	0	1	11
Control Delay (s)	0.0	0.3	13.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	13.3
Approach LOS			B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	517	44	23	496	18	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	544	46	24	522	19	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			591		1138	567
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			591		1138	567
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		91	98
cM capacity (veh/h)			985		217	523

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	591	546	29
Volume Left	0	24	19
Volume Right	46	0	11
cSH	1700	985	275
Volume to Capacity	0.35	0.02	0.11
Queue Length 95th (ft)	0	2	9
Control Delay (s)	0.0	0.7	19.7
Lane LOS		A	C
Approach Delay (s)	0.0	0.7	19.7
Approach LOS			C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX H

- County Board Policy J-25

COUNTY OF SAN DIEGO, CALIFORNIA
BOARD OF SUPERVISORS POLICY

Subject	Policy Number	Page
Participation by Individuals, Organizations, Private Developers, or other Jurisdictions in the Implementation of Intersection Betterments	I-25	1 of 3

Purpose

To provide a policy for participation by private developers, individuals, organizations or non-County public jurisdictions in the implementation of intersection betterments. For purposes of this policy intersection betterments shall include, but not be limited to, traffic signals, roundabouts, additional through lanes and turn lanes.

Background

In many instances, the implementation of intersection betterments involves intersections in which one or more of the approaches to the intersection are under the jurisdiction of a governmental entity other than the County. In other instances, as proposed Tentative Maps are reviewed it becomes apparent that a proposed development could impact traffic and contribute substantially to the need for an intersection betterment at a specific location. There are also occasions when an individual developer or organization indicates a willingness to provide additional contributions to accelerate the process of implementing an intersection betterment at a location that meets traffic signal warrants or an operational review has documented a need for an intersection improvement, but is not high enough on the Signal Priority List, or the Department of Public Works Intersection Betterment List to justify budgeting County funds for the project.

To establish the basis upon which the County will either require contributions from private developers or other jurisdictions for the cost of installing intersection betterments, or accept additional contributions from individuals, organizations or private developers to accelerate the implementation of intersection betterments, the following policy is adopted.

Policy

It is the policy of the Board of Supervisors that:

1. At intersections where one or more of the approaches to the intersections are under the jurisdiction of another governmental entity, and such intersections meet the nationally accepted warrants for the installation of a traffic signal or an operational review has documented a need for an intersection betterment, the costs of implementation of the intersection betterment shall be shared by the County and the other governmental entity. The percentage of the costs to be paid by each jurisdiction shall be directly related to the number of approaches to the intersection under the control of either the County or the other governmental entity.

For example, an intersection where two of the approaches are within a city's limits and two are within the unincorporated area would be financed by equal contributions from each jurisdiction.

2. When it is determined that a private development will generate substantial traffic at a specific intersection, the County will require from the developer a contribution toward the cost of the implementation of an intersection betterment as allowed by law. The amount of the contribution shall be based upon an analysis of the traffic that will be generated by the development. The developer's contributions will be retained for the project in the Public Works Administrator's Trust Fund until warrants are met for a signal installation project, and/or documentation is provided justifying another type of intersection betterment and the relative priority of the project justifies the expenditure of any public funds necessary to the project; or until the contribution has been returned under the provisions of Government Code Section 66001 (D). In lieu of a cash deposit for a contribution, required as a condition of approval of a final map, the developer may defer the amount of the contribution and guarantee the payment by providing a security as prescribed in subsections (a) (1), (a) (3), (a) (4) or (a) (5) of Section 66499 of the Government Code.

3. If fees are secured, the full amount of the fee, plus any adjustments, must be paid to the County prior to commencement of the work for which the fee was required or before issuance of any building permit, whichever occurs first. The original fee amount will be adjusted for inflation at the time of payment using the Market Trends Index, as published in the Engineering News Record, or by using any similar index approved by the Director of Public Works. When the fees plus any adjustment have been paid, the security will be released.

4. If an individual, developer or organization indicates a willingness to provide additional contributions to accelerate the implementation of an intersection betterment at a location which meets traffic signal warrants or an operational review has documented a need for an other type of intersection improvement, but is not high enough on the Signal Priority List or the Department of Public Works Intersection Betterment List to justify the budgeting of County Funds for the project, the County Engineer will review the proposal. A recommendation for such participation will then be forwarded to the Board of Supervisors for their consideration.

5. When a developer constructs or installs a warranted traffic signal, where it would otherwise not have been required, to facilitate access to that development, the County will not enter into a reimbursement agreement with the developer.

6. Where a new signal or a signal addition is required solely or mainly to permit access to a project, the developer shall contribute an amount which will provide reimbursement to the County for the first 30 years of operating costs of the signal or signal addition.

7. Signals installed by a developer shall include the provision for interconnection with adjacent signals, and signal fees shall include the cost of interconnection if the County Engineer determines the need.

Sunset Date

This policy will be reviewed for continuance by 12-31-10.

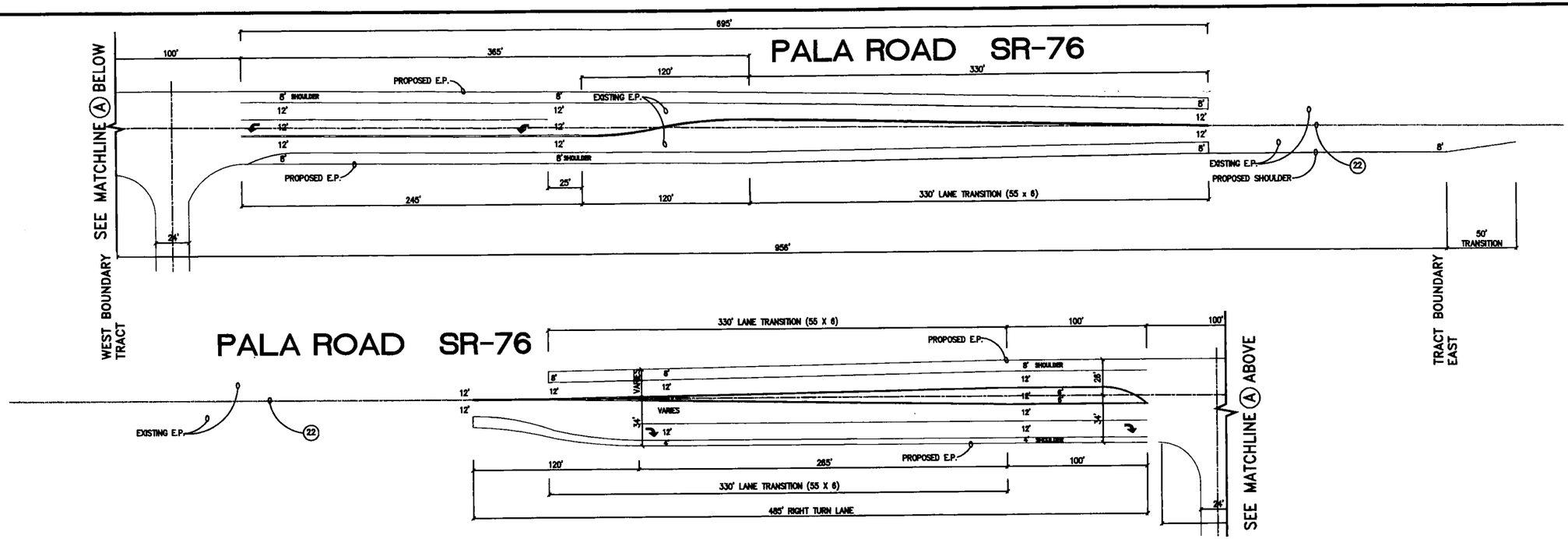
Board Action
6/19/73 (94)
12/04/84 (22)
3/1/88 (99)
6/15/93 (41)
12/15/93 (5)
7/14/99 (4)
06-23-04 (12)

CAO References
Department of Public Works

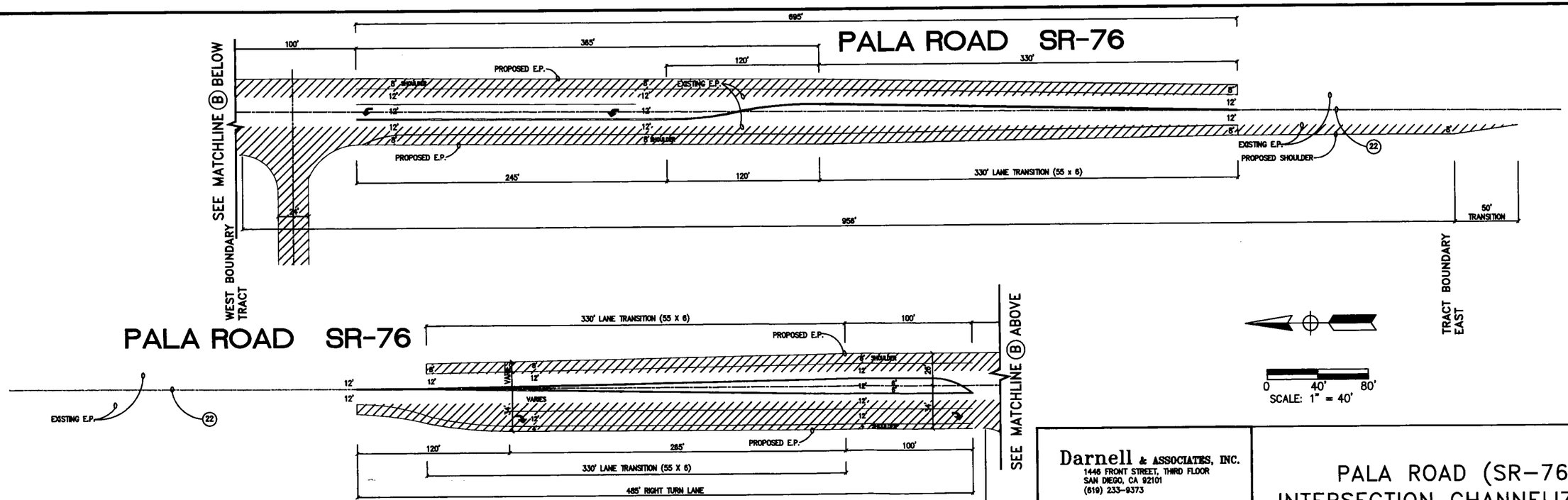
APPENDIX I

- Intersection Channelization Concept for SR-76 (Pala Road)
- Request for Exception to a Road Standard, March 29, 2007

Intersection Channelization Concept for SR-76 (Pala Road)



TYPICAL CHANNELIZATION CONCEPT



TYPICAL PAVEMENT WIDENING

LEGEND

▨ – DENOTES ROAD IMPROVEMENTS (PAVEMENT WIDENING)

Darnell & ASSOCIATES, INC.
1446 FRONT STREET, THIRD FLOOR
SAN DIEGO, CA 92101
(619) 233-9373

DWG:050310CP-2A.dwg | DATE:6-23-08 | BY: SN/JLL/CDJ

PALA ROAD (SR-76) INTERSECTION CHANNELIZATION AND PAVEMENT WIDENING CONCEPT

Request for Exception to a Road Standard, March 29, 2007

Your copy

County of San Diego

JOHN L. SNYDER
DIRECTOR

DEPARTMENT OF PUBLIC WORKS

5555 OVERLAND AVE, SUITE 2188
SAN DIEGO, CALIFORNIA 92123-1295

(858) 694-2212 FAX: (858) 268-0461
Web Site: sdcdpw.org

March 29, 2007

William Klaner, LS
Szytel Engineering and Surveying, Inc.
304 State Place
Escondido, CA 92029

Dear Mr. Klaner:

REQUEST FOR EXCEPTION TO A ROAD STANDARD AND/OR MODIFICATION TO PROJECT CONDITIONS – TM 5499

Department of Public Works (DPW) has reviewed your request for an exception to County Public Roads Standards Section 6.1.C.2, which requires that non-Circulation Element roads entering into a Circulation Element road to have centerlines separated by at least 300 feet, to permit locating the proposed TM 5499 access, private easement road, Street A, onto Pala Road (S.R. 76), a Circulation Element Major Road, approximately 230 feet southeasterly of an existing citrus grove access road.

TM 5499 is a subdivision of 48 acres into 31 minimum 1-acre residential lots. It fronts the southwesterly side of Pala Road (S.R. 76), and proposes one primary access onto Pala Road near the project's northwest corner. DPW is able to support your request for this exception to Roads Standards. The proposed access location allows joint use with the adjoining westerly parcel, and traffic on the citrus grove access road is minimal. It has been determined your request for exception will not adversely effect the safety and flow of traffic in the area.

If you have any questions or need additional information please contact Nael Areigat, DPW Project Manager at (858) 495-5747, or at facsimile (858) 694-8928.

Sincerely,

RICHARD E. CROMPTON
Assistant Director

REQUEST FOR EXCEPTION TO A ROAD STANDARD AND/OR MODIFICATION TO PROJECT CONDITIONS – TM 5499

REQUEST APPROVED

NATURE OF REQUEST:
The Department of Public Works received a Request for Exception to a Road Standard from William Klaner, LS, and Gary M. Szytel, R.C.E., Szytel Engineering and Surveying, Inc. The request is for a modification of County Public Roads Standards Section 6.1.C.2 requirement that non-Circulation Element roads entering into a Circulation Element road shall have their centerlines separated by at least 300 feet. The request is to permit TM 5499 proposed access, Street A, onto Pala Road, SR 76, a Circulation Element Major Road, to be centered approximately 230 feet southeasterly of an existing paved citrus grove access road. The request included responses to Exception to a Road Standard items, and exhibits prepared by William Klaner, and Gary M. Szytel, R.C.E. as follows:

1. 1" = 40' exhibit topographic mapping along / adjoining Pala Road (SR 76) showing existing grove access road and a portion of the TM 5499 frontage including the subject proposed project access Road, Street A, which serves the 31 lots of TM 5499, and shows proposed stub out access to adjoining parcels APN: 130-100-21 through 24 (Parcels 1 through 4, PM 12398).

2. Aerial Photo showing SR 76, TM 5499 frontage and the existing grove access road.

3. Page 1 of Attachment N (DPWs preliminary draft conditions) of the County's June 30, 2006 response to TM 5499's initial submittal. Condition 2 is that which this exception request proposes to address.

4. 12/21/2005 email from Hank Morris, traffic engineering consultant for TM 5499, to Caltrans which addresses the projects proposed access (including abandonment of an existing easterly driveway access to TM 5499 in favor the proposed westerly access "driveway".

The submittal indicates that the existing offsite driveway adjacent to proposed Street A which serves offsite parcels, APN: 130-100-21 through 24 have an estimated traffic of 24 trips/day, is proposed to be abandoned and be access served via proposed Street A. No cost estimate is included, but rather the submittal indicates that hardship includes cost of project redesign and possible loss of 40 potential development lots.

BACKGROUND:
TM 5499 proposes to subdivide 48 acres into 31 minimum 1-acre residential lots. It fronts the southwesterly side of Pala Road (S.R. 76), and proposes one primary access onto Pala Road near the project's northwest corner. TM5499 fronts along the southwesterly side of Pala Road (S.R. 76), a Circulation Element Major Road with Bike Lane. TM 5499 proposed to access onto Pala Road (S.R. 76) via the private easement

road Street A, a private easement road. An existing driveway access onto Pala Road (S.R. 76) in close proximity to proposed Street A, but the request indicates that this access will be abandoned and existing and proposed development traffic re-routed to Street A via projects proposed stub-out to connect to these parcels. Street A is required to be improved on-site to a graded width of twenty-eight feet (28') and to an improved width of twenty-four feet (24'), with asphalt concrete pavement over approved base per the Design Standards of Section 3.1(C) of the County Standards for Private Roads for one hundred one (101) to seven hundred fifty (750) trips, and includes proposed guarded access on-site, southerly of Pala Road (S.R. 76) to restrict traffic within the residential access area of TM 5499 to its 31 home sites. An existing paved citrus grove access road which serves only to provide access for grove operation and maintenance purposes. TM 5499 proposes a secondary access (for recreation and emergency purposes only) to SR 76 at Pauma Valley Drive via Luiseno Circle Drive (southeast of TM 5499).

PROJECT MANAGEMENT TEAM REVIEW:

At this time no traffic report has been submitted for the project. Among the issues to be addressed in the traffic study will be potential need for turning lanes on SR 76 at Street A, and sight distance from Street A along Pala Road (SR 76). A major issue of right-of-way for SR 76 has recently been addressed and the issue of separation between intersections now needs resolution. The primary access of the project onto Pala Road is Street A and traffic is estimated to be 396 trips/day when TM 5499 is developed and potentially 600 or so when the adjoining parcels are developed (no project has been submitted for such development of these parcels at this time.

It is noted that the adjoining four parcels of 48 total acres currently relinquished access onto SR 76 (as shown on PM 12398) except for two 40 foot wide accesses: one adjoining TM 5499 which is to be abandoned and a second access approximately 930 feet northwesterly.

The request was reviewed by DPW Traffic staff, who indicated that they "concur with the requested design modification to allow a driveway separation of 230 feet. The applicant has coordinated with Caltrans to minimize the number of driveways onto SR 76 and the driveway location appears to be located at the location that would cause the least traffic impact. It should be noted that SR 76, although designated as a Circulation Element Road, is under the jurisdiction of Caltrans. An encroachment permit for the driveway will be required by Caltrans. Prior to approval of the design modification a written concurrence from Caltrans should also be provided." The concurrence of Caltrans is indicated by DPLU 8-15-06 email to the applicants and Caltrans letters of July 18, and August 16, 2006, and by phone conversation between Caltrans and DPW team staff.

After reviewing the request, the Project Team is able to support the exception. The request indicates that the proposed location will accommodate the project traffic and the potential future traffic of the adjoining 48 acres. Requiring an alternate access would

impose too severe a hardship for this project. DPW requirements include certification of adequate sight distance and turning lanes at Street A, along Pala Road (S.R. 76). These requirements will need to be addressed in the traffic study to the satisfaction of DPW and Caltrans.

RECOMMENDATION:
It is recommended that the requested exception be approved.

APPLICANT ACTION:
Proceed with CEQA level submittals to DPLU and DPW which incorporate requested public access intersection alignment of Street A/Pala Road (S.R. 76). Provide documentation that the adjoining off-site owner(s) of APN: 130-100-21 through 24 will agree to relinquish their existing southeasterly access onto SR 76 in favor of the TM 5499 proposed Street A access.

DPW ACTION:
In DPWs project requirements for TM 5499, incorporate: 1) prior to approval of the final map provide off-site relinquishment of the southeasterly access onto SR 76 shown on PM 12398; and 2) modification of County Public Roads Standards Section 6.1.C.2 requirement that non-Circulation Element roads entering into a Circulation Element road shall have their centerlines separated by at least 300 feet, to permit TM 5499 access onto Pala Road (S.R. 76), Circulation Element road, at Street A, which is centered approximately 230 feet southeasterly of existing citrus grove access road.

Request (Recommended) ~~Not Recommended~~ _____ Date: 3.28.07
Nael Areigat

Request (Recommended) ~~Not Recommended~~ _____ Date: 4-2-07
Robert D. Christopher

Request (Approved) ~~Denied~~ _____ Date: 4/2/07
Richard E. Crompton

APPENDIX J

Responses to County Comments

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

MEMORANDUM

DATE: December 17, 2007

TO: The Law Office of Cynthia L. Eldred
Cynthia Eldred

FROM: Bill E. Darnell, P.E.

D&A Ref. No: 050310
RE: Club Estates (TM 5499) –Responses to County Comments on our Traffic Study

Darnell & Associates Inc. (D&A) has reviewed the County of San Diego's September 7, 2007 comment letter on our May 10, 2007 Traffic Study on the Club Estates (TM 5499) project. The following summarizes our responses to each of the comments. These responses have been incorporated into our December iteration of the traffic study.

Comment 1: While the project proposes only 30 new dwelling units TM 5499 composes 31-single family residential lots and should be indicated to be a 31-unit project.

Response 1: The traffic study has been revised to clarify that the project is a 31-unit project with 30 new units and 1 existing home. (See pages 1 and 2 of the December iteration of the study.)

Comment 2: The traffic study should include a description (Pg. 7) of the secondary access roadway conditions (existing and proposed) form the project access on Luiseno Circle Drive and continuing via 100-year flood free roadways to its public road access. The project/applicant should continue to coordinate with DPW/DPLU and Land Development staff in developing the project's final conditions of approval.

Response 2: The traffic study has been revised to include a description of Luiseno Circle Drive, see Page 8 of the December iteration of the study.

Comment 3: The traffic study (Pg. 13) assumes that 20% of the project-related traffic would distribute to/from Valley Center Road south of SR-76. Besides the Rincon casino, the traffic study should discuss/identify what uses would attract trips from the project site to Valley Center Road south of SR-76 route. Cole Grade Road would appear to be a more direct route to the Valley Center town center area, but the traffic study indicates that an almost equivalent percentage of project-related trips to distribute to/from Cole Grade Road (20-29%).

Response 3: The trip distribution utilized within the traffic study previously was based on the SANDAG 2005 Select Zone forecast. This iteration of the traffic study revised the distribution utilizing the SANDAG 2010 Select Zone Forecast. An explanation has been revised to provide an expanded discussion on the project's trip distribution assumptions. Please see page 11 of the December iteration of the traffic study.

J-1

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Comment 4: Figure 5 (Pg. 13) shows 20% of the project-related traffic being absorbed by the surrounding land uses along SR-76 between the project site and Valley Center Road. The traffic study should discuss/identify what uses along that segment of SR-76 would absorb such as significant percentage of project-related traffic.

Response 4: See Response 3. In addition, the revised trip distribution now only has 10% of the project traffic being absorbed by the surrounding land uses along Sr-76 between the project site and Valley Center Road. See page 11 of the December iteration of the traffic study for an expanded discussion on the project's trip distribution assumptions.

Comment 5: The scope of the cumulative assessment should be extended along SR-76 and Cole Grade Road. The cumulative assessment for SR-76 should be extended to the I-15 interchange. The cumulative assessment for Cole Grade Road should be extended to the Valley Center Road intersection.

Response 5: The cumulative assessment has been expanded accordingly. See Section IV of the December iteration of the traffic study.

Comment 6: The traffic the study should provide ADT LOS data for the cumulative scenario for the study area roadway segments and intersections.

Response 6: The cumulative scenario has been expanded to provide ADT LOS for the roadway segments. Intersection level of service analysis, however, was not provided. See Section IV of the December iteration of the traffic study.

Comment 7: The traffic study should discuss the effect of newly proposed tribal casino projects for the North County area such as the Pala casino expansion and the new La Jolla casino that were not considered in the County's TIF program on the project's cumulative assessment.

Response 7: Per discussions with DPW, the since there has been no official application made for the La Jolla Casino, it was not included in the cumulative analysis. The proposed expansion of the Pala Casino and Pauma Casino, were, however, included in the cumulative analysis. See page 22 of the December iteration of the traffic study.

Comment 8: Caltrans and DPW Traffic staff are reviewing and have been asked to comment on the proposed intersection channelization concept plan (Appendix I). As soon as these comments are available they will be forwarded to DPLU and the applicant.

Response 8: So noted.

Comment 9: The local fire district should review and approve the project's secondary access plan (Pgs 24-25).

Response 9: So noted.

Comment 10: The traffic study indicates (Pg. 2) that the proposed 30-unit project is located on a 48-acre site. The traffic study also references (Pg. 24) offsite parcels located on 48 acres that based on current zoning could yield a maximum of 48 units. The traffic study should clarify that two different 48-acre sites are being referred to (project site & offsite parcels). If the project site has a higher potential dwelling unit yield based on the current zoning, the traffic study should indicate that an updated traffic study would be required to analyze the revised project with the higher number of proposed dwelling units.

Response 10: The traffic study has been revised accordingly. See page 11, paragraph 3.

Comment 11: The conceptual striping should reflect that within the project frontage SR-76 is part of the County's Bicycle Network System and Bicycle Transportation Plan. **Response 11:** A note has been added to the study to indicate that that SR-76 within the project frontage is part of the County's Bicycle Network System. See page 28, paragraph 3.

J-2

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

MEMORANDUM

DATE: April 11, 2008

TO: Cynthia Eldred, Law Offices of Cynthia L. Eldred

FROM: Darnell & Associates, Inc.

D&A Ref. No: 050310 - Club Estates

RE: Response to County Comments (3/13/08)

We are in receipt of County of San Diego comments dated March 13, 2008, for the Club Estates traffic study prepared by Darnell & Associates on December 17, 2007. We have reviewed the comments and will offer the following responses and changes to the document (where necessary):

Comment 1: *Provide a more legible site plan.*

Response 2: We have included a legible site plan (Figure 2).

Comment 2: *Expand discussion on project distribution percentages.*

Response 2: The project traffic distribution was generated from a Select Zone assignment from SANDAG (as required by CEQA and consistent with County guidelines). Additional text is included to support the Select Zone assignment.

Comment 3: *Note that the County guidelines are revised effective December 5, 2007*

Response 3: Additional text is included as requested by the County.

Comment 4: *The study can apply the two-lane highway LOS criteria as described in the County's revised December 5, 2007.*

Response 4: We have incorporated the two-lane highway LOS criteria in the revised study and associated tables.

Comment 5: *The traffic study should provide a cumulative analysis "with and without" non-conforming General Plan projects on State Route 76.*

Response 5: A new table was created (Table 12) to address the County's comment. In summary, without the GPA projects, SR-76 will operate better than LOS D east of Interstate 15.

Comment 6: *Provide mitigation for the segment of Cole Grade Road not covered by the TIF program.*

j4

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Response 6: We have included proposed mitigation for this segment which is fair share contribution to the cumulative deficiency. This text is added under "mitigation measures" in the revised study.

Comment 7: The Appendix 1-2 concept plan should consider that County of San Diego requires 25-foot gap between 8-inch solid white line and the end of the bay taper (reverse curve)..

Response 7: The drawing has been revised to show the25 feet gap.

Comment 8: The traffic study should note that the 8-foot shoulders provide sufficient room to accommodate a Class II bike lane along project frontage, however, the eastbound shoulder reduces to 4-foot along the right turn pocket. A minimum of 5-foot is required for a bike lane or a transition provided at the intersection to aid through movement of bicycles.

Response 8: The proposed improvements along the project frontage provides frontage eight foot shoulders. To the west of the project, the future development of that property will need to comply with the class two-bike lane standards.

Comment 9: The frontage improvements should be identified as improvements that are part of the project as required in the Public Works Standards.

Response 9: This improvement is moved to "General" mitigation rather than direct impact mitigation and referenced as a Public Works Standard within the "mitigation measures" section of the revised study.

[END COMMENTS]

JS

APPENDIX K
SYNCHRO Intersection Worksheets

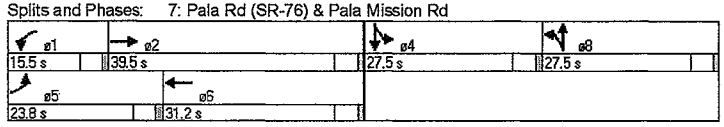
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.987			0.941				0.850
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1770	3008	0	1770	1584	0	1770	1753	0	0	1831	1583
Flt Permitted	0.950			0.950			0.950				0.983	
Satd. Flow (perm)	1770	3008	0	1770	1584	0	1770	1753	0	0	1831	1583
Satd. Flow (RTOR)		6			4			11				126
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	100	155	10	5	150	15	10	15	10	5	10	110
Lane Group Flow (vph)	115	189	0	6	189	0	11	28	0	0	17	126
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	9.4	20.3		6.8	11.6		7.7	7.7			8.1	8.1
Actuated g/C Ratio	0.19	0.41		0.12	0.23		0.16	0.16			0.17	0.17
v/c Ratio	0.34	0.15		0.03	0.51		0.04	0.09			0.05	0.33
Control Delay	21.4	9.5		27.2	19.2		23.8	18.8			22.7	6.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	21.4	9.5		27.2	19.2		23.8	18.8			22.7	6.7
LOS	C	A		C	B		C	B			C	A
Approach Delay		14.0			19.5			20.2			8.6	
Approach LOS		B			B			C			A	
Queue Length 50th (ft)	29	13		2	46		3	4			4	0
Queue Length 95th (ft)	80	44		12	112		17	27			21	38
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	603	1693		359	679		697	697			725	703
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.19	0.11		0.02	0.28		0.02	0.04			0.02	0.18

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 47.4
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 14.8 — Intersection LOS: B
Intersection Capacity Utilization 31.6% — ICU Level of Service A
Analysis Period (min) 15

Existing-AM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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bh
Darnell & Associates, Inc.
4/10/2008

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	25	190	140	5	10	15
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	28	216	159	6	11	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	165				435	162
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	165				435	162
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				98	98
cM capacity (veh/h)	1414				567	883

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	244	165	28
Volume Left	28	0	11
Volume Right	0	6	17
cSH	1414	1700	722
Volume to Capacity	0.02	0.10	0.04
Queue Length 95th (ft)	2	0	3
Control Delay (s)	1.0	0.0	10.2
Lane LOS	A		B
Approach Delay (s)	1.0	0.0	10.2
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	1	1	35	1	35	5	125	30	50	235	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	1	1	38	1	38	5	136	33	54	255	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	568	546	258	532	533	152	261			168		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568	546	258	532	533	152	261			168		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	91	100	96	100			96		
cM capacity (veh/h)	401	426	780	442	434	894	1304			1409		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	8	77	174	315
Volume Left	5	38	5	54
Volume Right	1	38	33	5
cSH	435	589	1304	1409
Volume to Capacity	0.02	0.13	0.00	0.04
Queue Length 95th (ft)	1	11	0	3
Control Delay (s)	13.4	12.0	0.3	1.6
Lane LOS	B	B	A	A
Approach Delay (s)	13.4	12.0	0.3	1.6
Approach LOS	B	B		

Intersection Summary				
Average Delay	2.8			
Intersection Capacity Utilization	38.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing-AM
050310 - Club Estates 10: Pala Rd (SR-76) & Cole Grade Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	210	115	60	135	1	100	1	55	1	3	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	1	250	137	71	161	1	119	1	65	1	4	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	162			387			628	626	318	691	693	161
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	162			387			628	626	318	691	693	161
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			94			68	100	91	100	99	100
cM capacity (veh/h)	1417			1172			373	376	722	310	344	884

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	388	233	186	6
Volume Left	1	71	119	1
Volume Right	137	1	65	1
cSH	1417	1172	450	382
Volume to Capacity	0.00	0.06	0.41	0.02
Queue Length 95th (ft)	0	5	50	1
Control Delay (s)	0.0	2.9	18.5	14.6
Lane LOS	A	A	C	B
Approach Delay (s)	0.0	2.9	18.5	14.6
Approach LOS			C	B

Intersection Summary				
Average Delay	5.2			
Intersection Capacity Utilization	54.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	240	20	15	175	15	25
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	289	24	18	211	18	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			313		548	301
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			313		548	301
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	96
cM capacity (veh/h)			1247		490	738

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	313	229	48
Volume Left	0	18	18
Volume Right	24	0	30
cSH	1700	1247	620
Volume to Capacity	0.18	0.01	0.08
Queue Length 95th (ft)	0	1	6
Control Delay (s)	0.0	0.7	11.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.7	11.3
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	31.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	65	190	125	60	130	65
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	75	218	144	69	149	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			293		540	184
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			293		540	184
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			89		66	91
cM capacity (veh/h)			1268		446	858

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	293	144	69	149	75
Volume Left	0	144	0	149	0
Volume Right	218	0	0	0	75
cSH	1700	1268	1700	446	858
Volume to Capacity	0.17	0.11	0.04	0.34	0.09
Queue Length 95th (ft)	0	10	0	36	7
Control Delay (s)	0.0	8.2	0.0	17.1	9.6
Lane LOS		A		C	A
Approach Delay (s)	0.0	5.5		14.6	
Approach LOS				B	

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

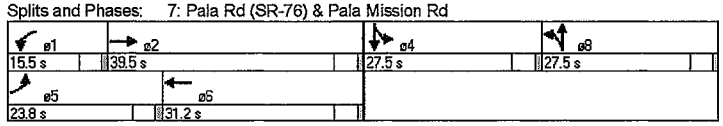
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.996			0.939				0.850
Flt Protected	0.950			0.950			0.950				0.986	
Satd. Flow (prot)	1770	3007	0	1770	1583	0	1770	1749	0	0	1837	1583
Flt Permitted	0.950			0.950			0.950				0.986	
Satd. Flow (perm)	1770	3007	0	1770	1583	0	1770	1749	0	0	1837	1583
Satd. Flow (RTOR)		32			1			23				98
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	140	170	45	40	190	5	30	30	20	10	25	85
Lane Group Flow (vph)	161	247	0	46	224	0	34	57	0	0	40	98
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	10.9	20.8		8.1	13.3		8.5	8.5			8.6	8.6
Actuated g/C Ratio	0.20	0.39		0.14	0.25		0.16	0.16			0.17	0.17
v/c Ratio	0.45	0.21		0.19	0.57		0.12	0.19			0.13	0.28
Control Delay	23.4	10.9		27.8	21.4		26.1	18.6			26.0	8.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	23.4	10.9		27.8	21.4		26.1	18.6			26.0	8.0
LOS	C	B		C	C		C	B			C	A
Approach Delay		15.8			22.5			21.4			13.3	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	46	16		13	63		10	10			12	0
Queue Length 95th (ft)	114	56		47	144		38	45			43	37
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	583	1617		354	655		670	677			696	661
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.28	0.15		0.13	0.34		0.05	0.08			0.06	0.15

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 51.7
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 18.0 Intersection LOS: B
Intersection Capacity Utilization 36.6% ICU Level of Service A
Analysis Period (min) 15

Existing-PM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	25	265	280	10	10	20
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	28	301	318	11	11	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	330				682	324
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	330				682	324
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				97	97
cM capacity (veh/h)	1230				406	717

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	330	330	34
Volume Left	28	0	11
Volume Right	0	11	23
cSH	1230	1700	571
Volume to Capacity	0.02	0.19	0.06
Queue Length 95th (ft)	2	0	5
Control Delay (s)	0.9	0.0	11.7
Lane LOS	A		B
Approach Delay (s)	0.9	0.0	11.7
Approach LOS			B

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

Existing-PM
050310 - Club Estates 47: Pauma Reservation & Pala Rd (SR-76)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	5	10	60	5	90	10	310	70	75	275	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	5	11	65	5	98	11	337	76	82	299	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	965	902	304	878	870	375	310			413		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	965	902	304	878	870	375	310			413		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	98	99	73	98	85	99			93		
cM capacity (veh/h)	185	255	735	245	267	671	1251			1146		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	27	168	424	391
Volume Left	11	65	11	82
Volume Right	11	98	76	11
cSH	287	389	1251	1146
Volume to Capacity	0.09	0.43	0.01	0.07
Queue Length 95th (ft)	8	53	1	6
Control Delay (s)	18.9	21.1	0.3	2.3
Lane LOS	C	C	A	A
Approach Delay (s)	18.9	21.1	0.3	2.3
Approach LOS	C	C		

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	62.0%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	400	100	40	380	4	95	2	50	1	1	2
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	1	476	119	48	452	5	113	2	60	1	1	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	457			595			1091	1090	536	1149	1148	455
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	457			595			1091	1090	536	1149	1148	455
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			38	99	89	99	99	100
cM capacity (veh/h)	1104			981			183	204	545	149	189	605

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	596	505	175	5
Volume Left	1	48	113	1
Volume Right	119	5	60	2
cSH	1104	981	237	261
Volume to Capacity	0.00	0.05	0.74	0.02
Queue Length 95th (ft)	0	4	127	1
Control Delay (s)	0.0	1.4	53.4	19.0
Lane LOS	A	A	F	C
Approach Delay (s)	0.0	1.4	53.4	19.0
Approach LOS			F	C

Intersection Summary				
Average Delay	7.9			
Intersection Capacity Utilization	73.6%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	355	40	25	310	40	25
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	428	48	30	373	48	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			476		886	452
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			476		886	452
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		84	95
cM capacity (veh/h)			1086		306	608

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	476	404	78
Volume Left	0	30	48
Volume Right	48	0	30
cSH	1700	1086	379
Volume to Capacity	0.28	0.03	0.21
Queue Length 95th (ft)	0	2	19
Control Delay (s)	0.0	0.9	17.0
Lane LOS		A	C
Approach Delay (s)	0.0	0.9	17.0
Approach LOS			C

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	47.4%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	105	255	135	100	225	145
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	121	293	155	115	259	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			414		693	267
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			414		693	267
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		27	78
cM capacity (veh/h)			1145		354	771

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	414	155	115	259	167
Volume Left	0	155	0	259	0
Volume Right	293	0	0	0	167
cSH	1700	1145	1700	354	771
Volume to Capacity	0.24	0.14	0.07	0.73	0.22
Queue Length 95th (ft)	0	12	0	139	20
Control Delay (s)	0.0	8.6	0.0	38.3	10.9
Lane LOS		A		E	B
Approach Delay (s)	0.0	5.0		27.6	
Approach LOS				D	

Intersection Summary			
Average Delay	11.8		
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

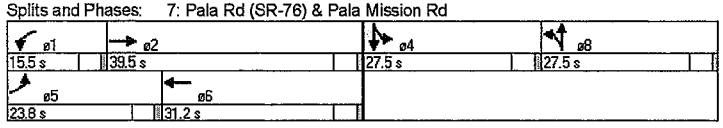
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.987			0.941				0.850
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1770	3007	0	1770	1584	0	1770	1753	0	0	1831	1583
Flt Permitted	0.950			0.950			0.950				0.983	
Satd. Flow (perm)	1770	3007	0	1770	1584	0	1770	1753	0	0	1831	1583
Satd. Flow (RTOR)		6			4			11				126
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	100	156	10	5	152	15	10	15	10	5	10	110
Lane Group Flow (vph)	115	190	0	6	192	0	11	28	0	0	17	126
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	9.4	20.4		6.8	11.7		7.7	7.7			8.2	8.2
Actuated g/C Ratio	0.19	0.41		0.12	0.24		0.16	0.16			0.17	0.17
v/c Ratio	0.34	0.15		0.03	0.51		0.04	0.09			0.05	0.34
Control Delay	21.5	9.4		27.2	19.2		24.0	18.8			22.8	6.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	21.5	9.4		27.2	19.2		24.0	18.8			22.8	6.8
LOS	C	A		C	B		C	B			C	A
Approach Delay		14.0			19.5			20.3			8.7	
Approach LOS		B			B			C			A	
Queue Length 50th (ft)	29	13		2	47		3	4			4	0
Queue Length 95th (ft)	80	44		12	114		17	26			21	38
Signal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	603	1693		358	679		696	697			724	702
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.19	0.11		0.02	0.28		0.02	0.04			0.02	0.18

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 47.5
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 14.8 — Intersection LOS: B
Intersection Capacity Utilization 31.7% — ICU Level of Service A
Analysis Period (min) 15

Existing+Project-AM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	25	191	142	5	10	15
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	28	217	161	6	11	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	167				438	164
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	167				438	164
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				98	98
cM capacity (veh/h)	1411				564	880

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	245	167	28
Volume Left	28	0	11
Volume Right	0	6	17
cSH	1411	1700	719
Volume to Capacity	0.02	0.10	0.04
Queue Length 95th (ft)	2	0	3
Control Delay (s)	1.0	0.0	10.2
Lane LOS	A		B
Approach Delay (s)	1.0	0.0	10.2
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	32.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing+Project-AM
050310 - Club Estates

47: Pauma Reservation & Pala Rd (SR-76)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	1	1	35	1	35	5	127	30	50	236	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	1	1	38	1	38	5	138	33	54	257	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	572	549	259	535	536	154	262			171		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	572	549	259	535	536	154	262			171		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	91	100	96	100			96		
cM capacity (veh/h)	399	424	779	440	432	892	1302			1407		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	8	77	176	316
Volume Left	5	38	5	54
Volume Right	1	38	33	5
cSH	432	586	1302	1407
Volume to Capacity	0.02	0.13	0.00	0.04
Queue Length 95th (ft)	1	11	0	3
Control Delay (s)	13.5	12.1	0.3	1.6
Lane LOS	B	B	A	A
Approach Delay (s)	13.5	12.1	0.3	1.6
Approach LOS	B	B		

Intersection Summary

Average Delay	2.8			
Intersection Capacity Utilization	38.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	212	115	70	139	1	100	1	59	1	3	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	1	252	137	83	165	1	119	1	70	1	4	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	167			389			659	657	321	727	724	166
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	167			389			659	657	321	727	724	166
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			93			66	100	90	100	99	100
cM capacity (veh/h)	1411			1169			353	357	720	289	326	878

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	390	250	190	6
Volume Left	1	83	119	1
Volume Right	137	1	70	1
cSH	1411	1169	435	363
Volume to Capacity	0.00	0.07	0.44	0.02
Queue Length 95th (ft)	0	6	55	1
Control Delay (s)	0.0	3.2	19.6	15.1
Lane LOS	A	A	C	C
Approach Delay (s)	0.0	3.2	19.6	15.1
Approach LOS			C	C

Intersection Summary				
Average Delay	5.5			
Intersection Capacity Utilization	55.3%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	247	20	15	178	15	25
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	298	24	18	214	18	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			322		560	310
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			322		560	310
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	96
cM capacity (veh/h)			1238		482	730

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	322	233	48
Volume Left	0	18	18
Volume Right	24	0	30
cSH	1700	1238	612
Volume to Capacity	0.19	0.01	0.08
Queue Length 95th (ft)	0	1	6
Control Delay (s)	0.0	0.7	11.4
Lane LOS		A	B
Approach Delay (s)	0.0	0.7	11.4
Approach LOS			B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	67	193	125	61	131	65
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	77	222	144	70	151	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			299		545	188
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			299		545	188
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			89		66	91
cM capacity (veh/h)			1262		442	854

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	299	144	70	151	75
Volume Left	0	144	0	151	0
Volume Right	222	0	0	0	75
cSH	1700	1262	1700	442	854
Volume to Capacity	0.18	0.11	0.04	0.34	0.09
Queue Length 95th (ft)	0	10	0	37	7
Control Delay (s)	0.0	8.2	0.0	17.3	9.6
Lane LOS		A		C	A
Approach Delay (s)	0.0	5.5		14.7	
Approach LOS				B	

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	266	6	3	196	14	7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	317	7	4	233	17	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			324		557	317
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			324		557	317
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	99
cM capacity (veh/h)			1236		490	724

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	317	7	4	233	25
Volume Left	0	0	4	0	17
Volume Right	0	7	0	0	8
cSH	1700	1700	1236	1700	549
Volume to Capacity	0.19	0.00	0.00	0.14	0.05
Queue Length 95th (ft)	0	0	0	0	4
Control Delay (s)	0.0	0.0	7.9	0.0	11.9
Lane LOS			A		B
Approach Delay (s)	0.0		0.1		11.9
Approach LOS					B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	24.0%	ICU Level of Service		A
Analysis Period (min)	15			

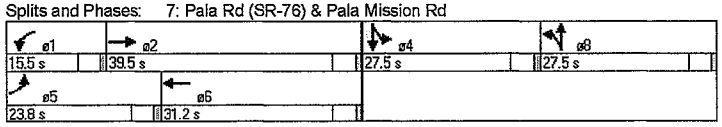
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.996			0.939				0.850
Flt Protected	0.950			0.950			0.950				0.986	
Satd. Flow (prot)	1770	3009	0	1770	1583	0	1770	1749	0	0	1837	1583
Flt Permitted	0.950			0.950			0.950				0.986	
Satd. Flow (perm)	1770	3009	0	1770	1583	0	1770	1749	0	0	1837	1583
Satd. Flow (RTOR)		31			1			23				98
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	140	173	45	40	191	5	30	30	20	10	25	85
Lane Group Flow (vph)	161	251	0	46	226	0	34	57	0	0	40	98
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	10.9	20.8		8.1	13.4		8.6	8.6			8.6	8.6
Actuated g/C Ratio	0.20	0.39		0.14	0.25		0.17	0.17			0.17	0.17
v/c Ratio	0.45	0.21		0.19	0.58		0.12	0.19			0.13	0.28
Control Delay	23.5	10.9		28.0	21.5		26.2	18.6			26.1	8.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	23.5	10.9		28.0	21.5		26.2	18.6			26.1	8.1
LOS	C	B		C	C		C	B			C	A
Approach Delay		15.8			22.6			21.4			13.3	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	46	17		13	63		10	10			12	0
Queue Length 95th (ft)	115	57		48	146		38	45			43	38
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	582	1617		353	655		669	676			695	660
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.28	0.16		0.13	0.35		0.05	0.08			0.06	0.15

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 51.9
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 18.0 Intersection LOS: B
Intersection Capacity Utilization 36.6% ICU Level of Service A
Analysis Period (min) 15

Existing+Project-PM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	25	268	281	10	10	20
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	28	305	319	11	11	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	331				686	325
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	331				686	325
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				97	97
cM capacity (veh/h)	1229				403	716

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	333	331	34
Volume Left	28	0	11
Volume Right	0	11	23
cSH	1229	1700	569
Volume to Capacity	0.02	0.19	0.06
Queue Length 95th (ft)	2	0	5
Control Delay (s)	0.9	0.0	11.7
Lane LOS	A		B
Approach Delay (s)	0.9	0.0	11.7
Approach LOS			B

Intersection Summary				
Average Delay		1.0		
Intersection Capacity Utilization		44.2%	ICU Level of Service	A
Analysis Period (min)		15		

Existing+Project-PM
050310 - Club Estates 47: Pauma Reservation & Pala Rd (SR-76)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	5	10	60	5	90	10	311	70	75	278	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	5	11	65	5	98	11	338	76	82	302	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	969	907	308	882	874	376	313			414		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	969	907	308	882	874	376	313			414		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	98	99	73	98	85	99			93		
cM capacity (veh/h)	184	254	732	243	265	670	1247			1145		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	27	168	425	395
Volume Left	11	65	11	82
Volume Right	11	98	76	11
cSH	285	387	1247	1145
Volume to Capacity	0.10	0.43	0.01	0.07
Queue Length 95th (ft)	8	54	1	6
Control Delay (s)	19.0	21.3	0.3	2.3
Lane LOS	C	C	A	A
Approach Delay (s)	19.0	21.3	0.3	2.3
Approach LOS	C	C		

Intersection Summary				
Average Delay	5.1			
Intersection Capacity Utilization	62.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	405	100	45	382	4	95	2	62	1	1	2
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	1	482	119	54	455	5	113	2	74	1	1	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	460			601			1111	1111	542	1183	1168	457
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	460			601			1111	1111	542	1183	1168	457
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			36	99	86	99	99	100
cM capacity (veh/h)	1101			976			177	197	541	136	183	604

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	602	513	189	5
Volume Left	1	54	113	1
Volume Right	119	5	74	2
cSH	1101	976	240	248
Volume to Capacity	0.00	0.05	0.79	0.02
Queue Length 95th (ft)	0	4	146	1
Control Delay (s)	0.0	1.5	59.5	19.8
Lane LOS	A	A	F	C
Approach Delay (s)	0.0	1.5	59.5	19.8
Approach LOS			F	C

Intersection Summary				
Average Delay	9.3			
Intersection Capacity Utilization	76.1%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	359	40	25	319	40	25
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	433	48	30	384	48	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			481		901	457
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			481		901	457
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		84	95
cM capacity (veh/h)			1082		300	604

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	481	414	78
Volume Left	0	30	48
Volume Right	48	0	30
cSH	1700	1082	372
Volume to Capacity	0.28	0.03	0.21
Queue Length 95th (ft)	0	2	20
Control Delay (s)	0.0	0.9	17.2
Lane LOS		A	C
Approach Delay (s)	0.0	0.9	17.2
Approach LOS			C

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	106	257	135	102	229	145
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	122	295	155	117	263	167
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			417		697	270
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			417		697	270
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		25	78
cM capacity (veh/h)			1142		352	769

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	417	155	117	263	167
Volume Left	0	155	0	263	0
Volume Right	295	0	0	0	167
cSH	1700	1142	1700	352	769
Volume to Capacity	0.25	0.14	0.07	0.75	0.22
Queue Length 95th (ft)	0	12	0	146	21
Control Delay (s)	0.0	8.6	0.0	40.2	11.0
Lane LOS		A		E	B
Approach Delay (s)	0.0	4.9		28.9	
Approach LOS				D	

Intersection Summary			
Average Delay	12.3		
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	451	17	9	424	7	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	537	20	11	505	8	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			557		1063	537
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			557		1063	537
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	99
cM capacity (veh/h)			1014		244	544

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	537	20	11	505	13
Volume Left	0	0	11	0	8
Volume Right	0	20	0	0	5
cSH	1700	1700	1014	1700	306
Volume to Capacity	0.32	0.01	0.01	0.30	0.04
Queue Length 95th (ft)	0	0	1	0	3
Control Delay (s)	0.0	0.0	8.6	0.0	17.3
Lane LOS			A		C
Approach Delay (s)	0.0		0.2		17.3
Approach LOS					C

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

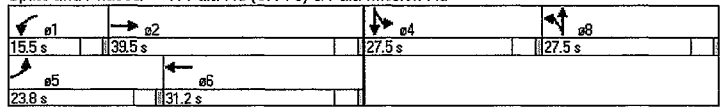
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944			0.986			0.934				0.850
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1770	3009	0	1770	1584	0	1770	1740	0	0	1827	1583
Flt Permitted	0.950			0.950			0.950				0.981	
Satd. Flow (perm)	1770	3009	0	1770	1584	0	1770	1740	0	0	1827	1583
Satd. Flow (RTOR)		119			5			18				138
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	110	275	164	19	191	20	97	20	16	10	15	120
Lane Group Flow (vph)	126	505	0	22	243	0	111	41	0	0	28	138
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	10.1	23.8		7.2	14.4		9.9	9.9			8.0	8.0
Actuated g/C Ratio	0.17	0.42		0.11	0.25		0.17	0.17			0.14	0.14
v/c Ratio	0.41	0.38		0.11	0.60		0.36	0.13			0.11	0.40
Control Delay	26.1	9.5		32.6	22.4		26.1	17.9			28.0	7.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	26.1	9.5		32.6	22.4		26.1	17.9			28.0	7.8
LOS	C	A		C	C		C	B			C	A
Approach Delay		12.8			23.3			23.9			11.2	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	38	35		7	70		33	7			9	0
Queue Length 95th (ft)	104	108		32	166		96	35			35	45
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	527	1666		306	646		618	620			623	630
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.24	0.30		0.07	0.38		0.18	0.07			0.04	0.22

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 56.7
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 16.3 Intersection LOS: B
Intersection Capacity Utilization 39.4% ICU Level of Service A
Analysis Period (min) 15

Cumulative (No Project) - AM
050310 - Club Estates 7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	32	315	185	10	17	27
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	36	358	210	11	19	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	222				647	216
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	222				647	216
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				95	96
cM capacity (veh/h)	1347				424	824

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	394	222	50
Volume Left	36	0	19
Volume Right	0	11	31
cSH	1347	1700	604
Volume to Capacity	0.03	0.13	0.08
Queue Length 95th (ft)	2	0	7
Control Delay (s)	1.0	0.0	11.5
Lane LOS	A		B
Approach Delay (s)	1.0	0.0	11.5
Approach LOS			B

Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	42.0%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	1	1	41	1	52	10	157	44	163	255	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1	1	45	1	57	11	171	48	177	277	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	910	877	283	855	859	195	288			218		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	910	877	283	855	859	195	288			218		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	100	82	100	93	99			87		
cM capacity (veh/h)	212	247	756	248	253	847	1274			1351		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	102	229	465
Volume Left	11	45	11	177
Volume Right	1	57	48	11
cSH	229	407	1274	1351
Volume to Capacity	0.06	0.25	0.01	0.13
Queue Length 95th (ft)	5	25	1	11
Control Delay (s)	21.7	16.8	0.4	3.9
Lane LOS	C	C	A	A
Approach Delay (s)	21.7	16.8	0.4	3.9
Approach LOS	C	C		

Intersection Summary				
Average Delay	4.8			
Intersection Capacity Utilization	49.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	230	136	80	161	5	120	5	67	5	5	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	274	162	95	192	6	143	6	80	6	6	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	198			436			761	755	355	835	833	195
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	198			436			761	755	355	835	833	195
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			51	98	88	97	98	99
cM capacity (veh/h)	1375			1124			293	308	689	233	278	847

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	442	293	229	18
Volume Left	6	95	143	6
Volume Right	162	6	80	6
cSH	1375	1124	367	331
Volume to Capacity	0.00	0.08	0.62	0.05
Queue Length 95th (ft)	0	7	100	4
Control Delay (s)	0.1	3.3	29.6	16.5
Lane LOS	A	A	D	C
Approach Delay (s)	0.1	3.3	29.6	16.5
Approach LOS			D	C

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	61.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	268	25	20	205	20	30
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	323	30	24	247	24	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			353		633	338
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			353		633	338
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		94	95
cM capacity (veh/h)			1206		435	704

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	353	271	60
Volume Left	0	24	24
Volume Right	30	0	36
cSH	1700	1206	564
Volume to Capacity	0.21	0.02	0.11
Queue Length 95th (ft)	0	2	9
Control Delay (s)	0.0	0.9	12.1
Lane LOS		A	B
Approach Delay (s)	0.0	0.9	12.1
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	72	210	135	71	147	70
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	83	241	155	82	169	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			324		595	203
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			324		595	203
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			87		59	90
cM capacity (veh/h)			1236		408	837

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	324	155	82	169	80
Volume Left	0	155	0	169	0
Volume Right	241	0	0	0	80
cSH	1700	1236	1700	408	837
Volume to Capacity	0.19	0.13	0.05	0.41	0.10
Queue Length 95th (ft)	0	11	0	50	8
Control Delay (s)	0.0	8.3	0.0	19.9	9.8
Lane LOS		A		C	A
Approach Delay (s)	0.0	5.5		16.6	
Approach LOS				C	

Intersection Summary			
Average Delay	6.7		
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

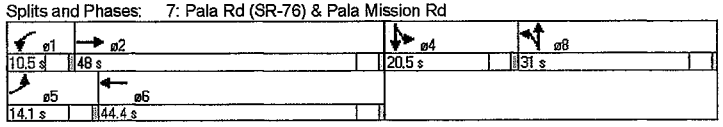
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.997			0.909				0.850
Flt Protected	0.950			0.950			0.950				0.984	
Satd. Flow (prot)	1770	3010	0	1770	1583	0	1770	1693	0	0	1833	1583
Flt Permitted	0.950			0.950			0.950				0.984	
Satd. Flow (perm)	1770	3010	0	1770	1583	0	1770	1693	0	0	1833	1583
Satd. Flow (RTOR)		217			1			59				98
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	150	616	489	81	551	10	416	35	54	15	30	90
Lane Group Flow (vph)	163	1202	0	88	610	0	452	97	0	0	49	98
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	14.1	48.0	0.0	10.5	44.4	0.0	31.0	31.0	0.0	20.5	20.5	20.5
Act Effct Green (s)	10.1	44.0		6.5	40.4		27.0	27.0			8.6	8.6
Actuated g/C Ratio	0.10	0.43		0.06	0.40		0.26	0.26			0.08	0.08
v/c Ratio	0.93	0.85		0.78	0.97		0.97	0.20			0.32	0.44
Control Delay	99.8	28.3		89.8	62.0		72.6	14.9			45.4	11.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	99.8	28.3		89.8	62.0		72.6	14.9			45.4	11.8
LOS	F	C		F	E		E	B			D	B
Approach Delay		36.8			65.5			62.4			23.0	
Approach LOS		D			E			E			C	
Queue Length 50th (ft)	107	304		58	384		291	19			31	0
Queue Length 95th (ft)	#242	425		#148	#648		#511	61			67	49
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	175	1420		113	627		468	491			275	321
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.93	0.85		0.78	0.97		0.97	0.20			0.18	0.31

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 102.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 48.4 Intersection LOS: D
Intersection Capacity Utilization 77.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Cumulative (No Project) - PM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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Darnell & Associates, Inc.
4/10/2008

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	32	749	679	22	24	29
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	36	851	772	25	27	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	797				1708	784
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	797				1708	784
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				71	92
cM capacity (veh/h)	825				96	393

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	888	797	60
Volume Left	36	0	27
Volume Right	0	25	33
cSH	825	1700	163
Volume to Capacity	0.04	0.47	0.37
Queue Length 95th (ft)	3	0	39
Control Delay (s)	1.2	0.0	39.4
Lane LOS	A		E
Approach Delay (s)	1.2	0.0	39.4
Approach LOS			E

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

Cumulative (No Project) - PM
050310 - Club Estates — 47: Pauma Reservation & Pala Rd (SR-76)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	15	10	15	95	10	442	15	371	113	515	330	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	11	16	103	11	480	16	403	123	560	359	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2470	2045	367	2005	1992	465	375			526		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2470	2045	367	2005	1992	465	375			526		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	57	98	0	61	20	99			46		
cM capacity (veh/h)	2	26	678	17	28	598	1183			1041		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	43	595	542	935
Volume Left	16	103	16	560
Volume Right	16	480	123	16
cSH	4	82	1183	1041
Volume to Capacity	10.32	7.22	0.01	0.54
Queue Length 95th (ft)	Err	Err	1	83
Control Delay (s)	Err	Err	0.4	10.9
Lane LOS	F	F	A	B
Approach Delay (s)	Err	Err	0.4	10.9
Approach LOS	F	F		

Intersection Summary				
Average Delay	3021.0			
Intersection Capacity Utilization	120.0%	ICU Level of Service	H	
Analysis Period (min)	15			

Cumulative (No Project) - PM
050310 - Club Estates — 10: Pala Rd (SR-76) & Cole Grade Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	465	140	53	449	5	139	5	75	5	5	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	554	167	63	535	6	165	6	89	6	6	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	540			720			1321	1315	637	1405	1396	538
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	540			720			1321	1315	637	1405	1396	538
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			93			0	96	81	93	95	99
cM capacity (veh/h)	1028			881			120	146	477	87	130	544

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	726	604	261	18
Volume Left	6	63	165	6
Volume Right	167	6	89	6
cSH	1028	881	162	143
Volume to Capacity	0.01	0.07	1.61	0.13
Queue Length 95th (ft)	0	6	445	10
Control Delay (s)	0.2	1.9	349.9	33.8
Lane LOS	A	A	F	D
Approach Delay (s)	0.2	1.9	349.9	33.8
Approach LOS			F	D

Intersection Summary				
Average Delay	57.9			
Intersection Capacity Utilization	86.1%	ICU Level of Service	E	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	418	45	30	385	45	30
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	504	54	36	464	54	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			558		1067	531
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			558		1067	531
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		77	93
cM capacity (veh/h)			1013		237	548

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	558	500	90
Volume Left	0	36	54
Volume Right	54	0	36
cSH	1700	1013	307
Volume to Capacity	0.33	0.04	0.29
Queue Length 95th (ft)	0	3	30
Control Delay (s)	0.0	1.0	21.6
Lane LOS		A	C
Approach Delay (s)	0.0	1.0	21.6
Approach LOS			C

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	132	289	145	133	267	155
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	152	332	167	153	307	178
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			484		804	318
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			484		804	318
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			85		0	75
cM capacity (veh/h)			1079		298	723

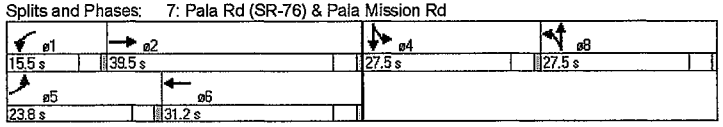
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	484	167	153	307	178
Volume Left	0	167	0	307	0
Volume Right	332	0	0	0	178
cSH	1700	1079	1700	298	723
Volume to Capacity	0.28	0.15	0.09	1.03	0.25
Queue Length 95th (ft)	0	14	0	283	24
Control Delay (s)	0.0	8.9	0.0	99.2	11.6
Lane LOS		A		F	B
Approach Delay (s)	0.0	4.7		67.0	
Approach LOS				F	

Intersection Summary				
Average Delay	26.4			
Intersection Capacity Utilization	57.5%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944			0.986			0.934				0.850
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1770	3008	0	1770	1583	0	1770	1740	0	0	1827	1583
Flt Permitted	0.950			0.950			0.950				0.981	
Satd. Flow (perm)	1770	3008	0	1770	1583	0	1770	1740	0	0	1827	1583
Satd. Flow (RTOR)		119			5			18				138
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	110	276	164	19	193	20	97	20	16	10	15	120
Lane Group Flow (vph)	126	506	0	22	245	0	111	41	0	0	28	138
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	23.8	39.5	0.0	15.5	31.2	0.0	27.5	27.5	0.0	27.5	27.5	27.5
Act Effct Green (s)	10.1	23.8		7.2	14.4		9.9	9.9			7.9	7.9
Actuated g/C Ratio	0.17	0.42		0.11	0.25		0.17	0.17			0.14	0.14
v/c Ratio	0.41	0.38		0.11	0.60		0.36	0.13			0.11	0.41
Control Delay	26.2	9.5		32.7	22.5		26.2	18.0			28.1	7.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	26.2	9.5		32.7	22.5		26.2	18.0			28.1	7.8
LOS	C	A		C	C		C	B			C	A
Approach Delay		12.8			23.3			24.0			11.2	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	38	35		7	70		33	7			9	0
Queue Length 95th (ft)	104	108		32	167		96	35			35	45
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	527	1666		306	645		618	619			622	630
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.24	0.30		0.07	0.38		0.18	0.07			0.05	0.22

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 56.7
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 16.3 Intersection LOS: B
Intersection Capacity Utilization 39.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	32	316	187	10	17	27
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	36	359	212	11	19	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	224				650	218
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	224				650	218
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				95	96
cM capacity (veh/h)	1345				422	822

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	395	224	50
Volume Left	36	0	19
Volume Right	0	11	31
cSH	1345	1700	602
Volume to Capacity	0.03	0.13	0.08
Queue Length 95th (ft)	2	0	7
Control Delay (s)	1.0	0.0	11.5
Lane LOS	A		B
Approach Delay (s)	1.0	0.0	11.5
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	1	1	41	1	52	10	159	44	163	256	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	1	1	45	1	57	11	173	48	177	278	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	914	880	284	858	862	197	289			221		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	914	880	284	858	862	197	289			221		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	100	100	82	100	93	99			87		
cM capacity (veh/h)	211	246	755	246	252	844	1273			1349		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	102	232	466
Volume Left	11	45	11	177
Volume Right	1	57	48	11
cSH	227	405	1273	1349
Volume to Capacity	0.06	0.25	0.01	0.13
Queue Length 95th (ft)	5	25	1	11
Control Delay (s)	21.8	16.9	0.4	3.9
Lane LOS	C	C	A	A
Approach Delay (s)	21.8	16.9	0.4	3.9
Approach LOS	C	C		

Intersection Summary				
Average Delay	4.8			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	232	136	80	165	5	120	5	67	5	5	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	276	162	95	196	6	143	6	80	6	6	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	202			438			768	762	357	842	840	199
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	202			438			768	762	357	842	840	199
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			51	98	88	97	98	99
cM capacity (veh/h)	1369			1122			290	305	687	231	275	842

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	444	298	229	18
Volume Left	6	95	143	6
Volume Right	162	6	80	6
cSH	1369	1122	364	327
Volume to Capacity	0.00	0.08	0.63	0.05
Queue Length 95th (ft)	0	7	102	4
Control Delay (s)	0.1	3.3	30.2	16.6
Lane LOS	A	A	D	C
Approach Delay (s)	0.1	3.3	30.2	16.6
Approach LOS			D	C

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	275	25	20	208	20	30
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	331	30	24	251	24	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			361		645	346
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			361		645	346
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		94	95
cM capacity (veh/h)			1197		428	697

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	361	275	60
Volume Left	0	24	24
Volume Right	30	0	36
cSH	1700	1197	557
Volume to Capacity	0.21	0.02	0.11
Queue Length 95th (ft)	0	2	9
Control Delay (s)	0.0	0.9	12.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.9	12.3
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	74	213	135	72	148	70
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	85	245	155	83	170	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			330		601	207
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			330		601	207
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			87		58	90
cM capacity (veh/h)			1230		405	833

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	330	155	83	170	80
Volume Left	0	155	0	170	0
Volume Right	245	0	0	0	80
cSH	1700	1230	1700	405	833
Volume to Capacity	0.19	0.13	0.05	0.42	0.10
Queue Length 95th (ft)	0	11	0	51	8
Control Delay (s)	0.0	8.4	0.0	20.2	9.8
Lane LOS		A		C	A
Approach Delay (s)	0.0	5.4		16.8	
Approach LOS				C	

Intersection Summary			
Average Delay	6.7		
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	292	6	3	225	14	7
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	348	7	4	268	17	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			355		623	348
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			355		623	348
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	99
cM capacity (veh/h)			1204		449	696

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	348	7	4	268	25
Volume Left	0	0	4	0	17
Volume Right	0	7	0	0	8
cSH	1700	1700	1204	1700	509
Volume to Capacity	0.20	0.00	0.00	0.16	0.05
Queue Length 95th (ft)	0	0	0	0	4
Control Delay (s)	0.0	0.0	8.0	0.0	12.4
Lane LOS			A		B
Approach Delay (s)	0.0		0.1		12.4
Approach LOS					B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		

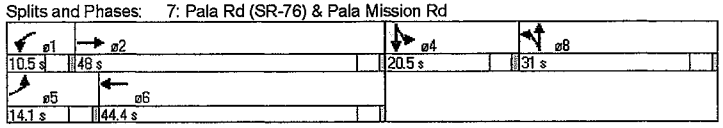
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.997			0.909				0.850
Flt Protected	0.950			0.950			0.950				0.984	
Satd. Flow (prot)	1770	3009	0	1770	1583	0	1770	1693	0	0	1833	1583
Flt Permitted	0.950			0.950			0.950				0.984	
Satd. Flow (perm)	1770	3009	0	1770	1583	0	1770	1693	0	0	1833	1583
Satd. Flow (RTOR)		217			1			59				98
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	150	619	489	81	552	10	416	35	54	15	30	90
Lane Group Flow (vph)	163	1205	0	88	611	0	452	97	0	0	49	98
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Total Split (s)	14.1	48.0	0.0	10.5	44.4	0.0	31.0	31.0	0.0	20.5	20.5	20.5
Act Effct Green (s)	10.1	44.0		6.5	40.4		27.0	27.0			8.6	8.6
Actuated g/C Ratio	0.10	0.43		0.06	0.40		0.26	0.26			0.08	0.08
v/c Ratio	0.93	0.85		0.78	0.97		0.97	0.20			0.32	0.44
Control Delay	99.8	28.4		89.8	62.3		72.6	14.9			45.4	11.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	99.8	28.4		89.8	62.3		72.6	14.9			45.4	11.8
LOS	F	C		F	E		E	B			D	B
Approach Delay		36.9			65.8			62.4			23.0	
Approach LOS		D			E			E			C	
Queue Length 50th (ft)	107	306		58	385		291	19			31	0
Queue Length 95th (ft)	#242	427		#148	#649		#511	61			67	49
Internal Link Dist (ft)		1753			2771			606			1682	
Turn Bay Length (ft)												
Base Capacity (vph)	175	1420		113	627		468	491			275	321
Starvation Cap Reductn	0	0		0	0		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.93	0.85		0.78	0.97		0.97	0.20			0.18	0.31

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 102.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 48.6 Intersection LOS: D
Intersection Capacity Utilization 77.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Cumulative (With Project) - PM
050310 - Club Estates
7: Pala Rd (SR-76) & Pala Mission Rd

Splits and Phases: 7: Pala Rd (SR-76) & Pala Mission Rd



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4/10/2008

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	32	752	680	22	24	29
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	36	855	773	25	27	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	798				1712	785
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	798				1712	785
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				71	92
cM capacity (veh/h)	825				95	393

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	891	798	60
Volume Left	36	0	27
Volume Right	0	25	33
cSH	825	1700	162
Volume to Capacity	0.04	0.47	0.37
Queue Length 95th (ft)	3	0	39
Control Delay (s)	1.2	0.0	39.7
Lane LOS	A		E
Approach Delay (s)	1.2	0.0	39.7
Approach LOS			E

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		

Cumulative (With Project) - PM
050310 - Club Estates — 47: Pauma Reservation & Pala Rd (SR-76)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	15	10	15	95	10	442	15	372	113	515	333	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	11	16	103	11	480	16	404	123	560	362	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2474	2049	370	2010	1996	466	378			527		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2474	2049	370	2010	1996	466	378			527		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	57	98	0	60	19	99			46		
cM capacity (veh/h)	2	25	676	17	27	597	1180			1040		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	43	595	543	938
Volume Left	16	103	16	560
Volume Right	16	480	123	16
cSH	4	81	1180	1040
Volume to Capacity	10.49	7.30	0.01	0.54
Queue Length 95th (ft)	Err	Err	1	83
Control Delay (s)	Err	Err	0.4	10.9
Lane LOS	F	F	A	B
Approach Delay (s)	Err	Err	0.4	10.9
Approach LOS	F	F		

Intersection Summary				
Average Delay	3014.9			
Intersection Capacity Utilization	120.3%	ICU Level of Service	H	
Analysis Period (min)	15			

Cumulative (With Project) - PM
050310 - Club Estates 10: Pala Rd (SR-76) & Cole Grade Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	470	140	58	451	5	139	5	87	5	5	5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	560	167	69	537	6	165	6	104	6	6	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	543			726			1342	1336	643	1439	1416	540
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	543			726			1342	1336	643	1439	1416	540
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			92			0	96	78	92	95	99
cM capacity (veh/h)	1026			877			115	141	474	78	126	542

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	732	612	275	18
Volume Left	6	69	165	6
Volume Right	167	6	104	6
cSH	1026	877	162	133
Volume to Capacity	0.01	0.08	1.70	0.13
Queue Length 95th (ft)	0	6	485	11
Control Delay (s)	0.2	2.0	387.0	36.2
Lane LOS	A	A	F	E
Approach Delay (s)	0.2	2.0	387.0	36.2
Approach LOS			F	E

Intersection Summary			
Average Delay	66.2		
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	422	45	30	394	45	30
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	508	54	36	475	54	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			563		1083	536
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			563		1083	536
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		77	93
cM capacity (veh/h)			1009		232	545

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	563	511	90
Volume Left	0	36	54
Volume Right	54	0	36
cSH	1700	1009	301
Volume to Capacity	0.33	0.04	0.30
Queue Length 95th (ft)	0	3	31
Control Delay (s)	0.0	1.0	22.0
Lane LOS		A	C
Approach Delay (s)	0.0	1.0	22.0
Approach LOS			C

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	133	291	145	135	271	155
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	153	334	167	155	311	178
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			487		809	320
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			487		809	320
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			85		0	75
cM capacity (veh/h)			1076		296	721

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2
Volume Total	487	167	155	311	178
Volume Left	0	167	0	311	0
Volume Right	334	0	0	0	178
cSH	1700	1076	1700	296	721
Volume to Capacity	0.29	0.15	0.09	1.05	0.25
Queue Length 95th (ft)	0	14	0	296	24
Control Delay (s)	0.0	9.0	0.0	106.0	11.6
Lane LOS		A		F	B
Approach Delay (s)	0.0	4.6		71.7	
Approach LOS				F	

Intersection Summary			
Average Delay	28.2		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	517	17	9	496	7	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	615	20	11	590	8	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			636		1227	615
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			636		1227	615
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	99
cM capacity (veh/h)			948		195	491

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	615	20	11	590	13
Volume Left	0	0	11	0	8
Volume Right	0	20	0	0	5
cSH	1700	1700	948	1700	249
Volume to Capacity	0.36	0.01	0.01	0.35	0.05
Queue Length 95th (ft)	0	0	1	0	4
Control Delay (s)	0.0	0.0	8.8	0.0	20.2
Lane LOS			A		C
Approach Delay (s)	0.0		0.2		20.2
Approach LOS					C

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	37.2%	ICU Level of Service		A
Analysis Period (min)	15			

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